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ABSTRACT

This glossary of education reform jargon provides the reader with information concerning the concepts, practices, and places where change is being discussed or carried out. Emphasis is placed on educational reform and the role of the federal government in that reform. Appendixes include widely used acronyms, publications of key agencies, an extensive bibliography of publications on national educational reform, a selected bibliography of educational glossaries and directors, and statistics of trends in education. (MJM)

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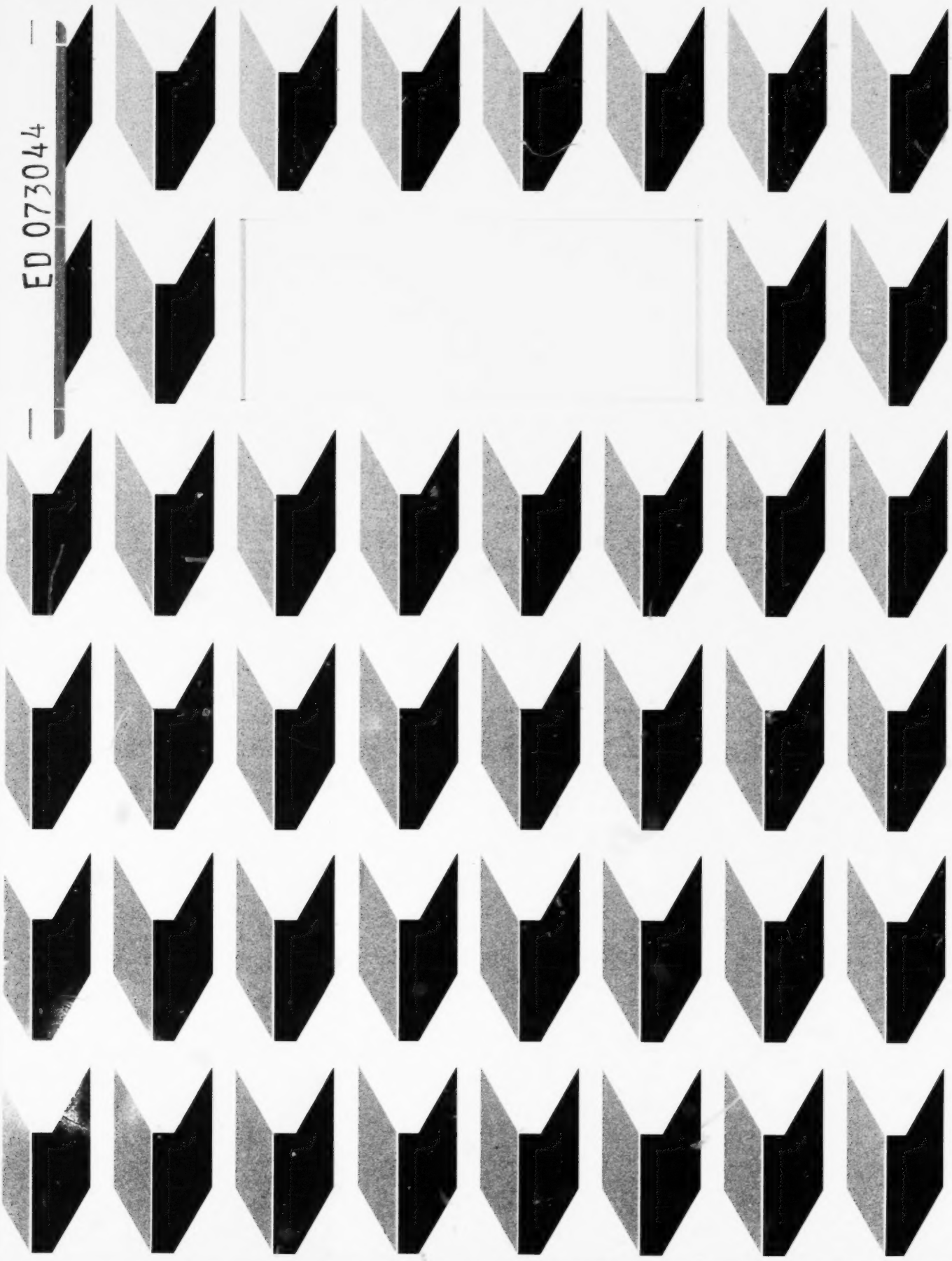

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REFORMESE JARGON: THE LANGUAGE AND LITERATURE OF EDUCATIONAL REFORM

by
Allen Schmieder

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PREFACE

Profound Simplitude #26

(Some Natural Laws of Education--with some credit to Newton 1-3)

1. *Interaction*: For every study there is an equal and opposite study.

2. *Inertia*: Minds without motion tend to stay without motion and in a straight line.

3. *Acceleration*: The acceleration of education is a function of the force of the faculty.

--Allen Schmieder

January 1973

FOREWORD

While reading or listening or talking, todays educator is certain to hear and use new terms or to use familiar terms in special ways. Allen Schmieder in this publication has provided a valuable service in developing a glossary of educational jargonese. The document is useful in itself; it provides the reader with information and insight concerning the concepts, the practices, and the places where change is being discussed or carried out. The publication also enables the reader to read extensively in the educational literature, to listen with understanding to discussions, and to interact with some degree of precision concerning the pertinent educational issues of the day. This document is somewhat exceptional in the ERIC family of generated monographs and books in that it does not provide analyses and interpretations of the ERIC-processed literature. This document is, however, a valued and valuable supplement to analytical-interpretive efforts of the Clearinghouse and that of others.

The publication of this document does not constitute endorsement of the concepts of programs reported herein. Obviously, Allen Schmieder in compiling the glossary and developing definitions reflected certain biasis. The work therefore reflects primarily his understanding of the big topics of the day are and which terminology provides an understanding of this large societal educational context. That he carried out a systematic and prodigious effort is obvious. The Clearinghouse is deeply appreciative of the work that he, his Office of Education colleagues, and numerous other educators have put into the development of this publication.

Publication of this document does not in any way endorse the work of Schmieder by the Office of Education, the National Institute of Education, the sponsors or the Clearinghouse itself. This endeavor is part of the continuing effort to meet the idea and information needs of the education community and the larger society. In addition to the credits previously noted, it is appropriate to give particular credit to Ms. Margaret Donley, Clearinghouse Publications Coordinator and to Ms. Christine Pazak, Clearinghouse Publications Assistant.

You may do further research on this topic by checking issues of Research in Education (RIE) and Current Index to Journals in Education (CIJE). Both RIE and CIJE use the same descriptors (index terms). Documents in RIE are listed in blocks according to the clearinghouse code letters which processed them, beginning with the ERIC Clearinghouse on Adult Education (AC) and ending with the ERIC Clearinghouse on Vocational and Technical Education (VT). The clearinghouse code letters, which are listed at the beginning of RIE, appear opposite the ED number at the beginning of each entry. "SP" (School Personnel) designates documents processed by the ERIC Clearinghouse on Teacher Education.

In addition to using the ERIC Thesaurus, RIE, CIJE, and various ERIC indexes, you will find it helpful to be placed on the mailing list of the ERIC clearinghouses which are likely to abstract and index as well as

develop publications pertinent to your needs and interests. The newsletters are provided on a complimentary basis on request to the individual clearinghouses.

For readers uncertain how to use ERIC capabilities effectively, we recommend the following materials which are available in microfiche and hardcopy through the ERIC Document Reproduction Service: (a) How To Conduct a Search Through ERIC, ED 036 499, microfiche $.65, hardcopy $3.29; (b) Instructional Materials on Educational Resources Information Center (ERIC). Part Two. Information Sheets on ERIC, ED 043 580, microfiche $.65; hardcopy $3.29. Item "b" is available as a complimentary item, while the supply lasts, from this Clearinghouse.

--Joel L. Burdin
Director

January 1973

ABSTRACT

This glossary of education reform jargon provides the reader with information concerning the concepts, practices, and places where change is being discussed or a carried out. Emphasis is placed on educational reform and the role of the federal government in that reform. Appendixes include widely used acronyms, key publications of key agencies, an extensive bibliography of publications on national educational reform, a selected bibliography of educational glossaries and directories, and statistics of trends in education. (MJM)

ERIC DESCRIPTORS

To expand a bibliography using ERIC, descriptors or search terms are used. To use a descriptor: (1) Look up the descriptor in the SUBJECT INDEX of monthly, semi-annual, or annual issue of Research in Education (RIE). (2) Beneath the descriptors you will find title(s) of documents. Decide which title(s) you wish to pursue. (3) Note the "ED" number beside the title. (4) Look up the "ED" number in the "DOCUMENT RESUME SECTION" of the appropriate issue of RIE. With the number you will find a summary of the document and often the document's cost in microfiche and/or hardcopy. (5) Repeat the above procedure, if desired, for other issues of RIE and for other descriptors. (6) For information about how to order ERIC documents, turn to the back pages of RIE. (7) Indexes and annotations of journal articles can be found in Current Index to Journals in Education by following the same procedure. Periodical articles cannot be secured through ERIC.

TOPIC: *Reformese Jargon: The Language and Literature of Educational Reform.*

DESCRIPTORS TO USE IN CONTINUING SEARCH OF RIE AND CIJE:

Definitions
*Educational Change
*Educational Practice
*Educational Trends
*Federal Government
*Glossaries
Progressive Education

*Asterisk(s) indicate major descriptors.

INTRODUCTION

At one of those "high level conferences" that we all attend regularly, I was holding forth on federal programs and educational renewal when a "well-informed" teacher interrupted me and asked what I meant by an "LEA." It reminded me of how confused I was when first introduced to acronyms and labels such as BESE, NASA, AACTE, DEPT, Cooperative Research, PERT Charts, and at least eight varieties of NDEA (not to mention NSA and CIA).* I also received considerable inspiration for this effort during a recent tour of English Teacher Centers where my use of such scholarly and dignified American education terms as interface, intervention strategy, and confirmatory mechanism caused the folks who thought they invented the language to roll in the aisles with confusion and laughter.

This glossary is presented in the hope of making the word and organization maze a little less mazey and as a result, improve communication among those people who are concerned with educational reform and the role of the federal government in that reform. It is an attempt to define the "reformese jargon" that is most commonly used around the country by those discussing educational reform.

Because all of my federal work experience has been within the Office of Education, the glossary gives major emphasis to the programs of the Department of Health, Education and Welfare's Division of Education and only briefly introduces the reader to the National Science Foundation, the National Endowments for the Arts and Humanities, the Office of Economic Opportunity, and the National Institutes of Health. For more complete information about the education programs of these important agencies, write to their Public Affairs Offices or directly to the program of special interest to you.

I am sure that I have overlooked some of the most significant as well as some of the most dazzling acronyms and terms, so I invite you to fill them in wherever there is space and then send copies of the entries to me c/o the Office of Education so that they can be included should any future versions of the glossary be published. There is also no doubt that many of the definitions that are included will excite some thoughtful readers, and I expect considerable debate over the meanings of certain terms. I hope that the dialogues will be rich ones and that the author will be brought into the discussion whenever possible.

I am deeply appreciative of all of the work, words, and criticisms that were so generously given during the development of the glossary. Outstanding contributions were made by Celeste Woodley and Ina Mullis of the University of Colorado, Michael Fleming and Kathy Adam of the

*Some of these acronyms, like their related programs, have passed away, and I am sad to announce that they cannot be found in this work.

Leadership Training Institute, University of South Florida, and Kathleen Splett, Lynn Beveridge, Bruce Gaarder, and George Kaplan of the Office of Education.

Allen Schmieder
National Center for the Improvements of Educational Systems

Janurary 1973

A GLOSSARY OF EDUCATIONAL REFORM

Accountability

The responsibility of educators at all levels to account in measurable terms for the effectiveness of their programs--especially in terms of outcomes. The concept is central to the educational reform movement and has evolved in part from systematic efforts to relate educational procedures to educational results at all levels. Accountability of the United States Office of Education and its various bureaus and national centers is measured in terms of (1) the quality of their response to national priorities and to the school/community site and (2) improvement achieved in the performance of educational personnel and their students. (See also Accountability Model)

Accountability Model

A model of evaluation used by certain programs in the United States Office of Education, which emphasizes the following twelve factors as essential organizing ingredients to assure the possibility of effecting accountability in any given program:

1. *Community Involvement*: participation of community leaders and organizations in educational program activity to facilitate better use of community resources, community understanding of program objectives and procedures, and delegation of program responsibilities to appropriate community clients, services, and support groups.

2. *Technical Assistance*: the provision of expertise and resources in program (project) planning, operation, and evaluation by drawing upon outside resources such as the community, business, and industrial, labor, educational, scientific, artistic, social/welfare, and governmental agencies.

3. *Needs Assessment*: the systematic identification of target-group and situational factors essential to planning a relevant program of action.

4. *Change Strategies*: strategies for producing appropriate systemic change in the educational enterprise in order to improve it.

5. *Project or Program Management Systems*: the adaptation of the systems approach to education and its management through such techniques as "management by objectives," PPBS, PERT, CPM.

6. *Performance Objectives*: the specification of objectives in terms of specific behaviors to be attained by the learners or teachers and the measures and means for assessing the degree of accomplishment of these predetermined standards.

7. *Performance Budgeting*: the allocation of fiscal resources in accordance with program (project) objectives to be realized, rather than by functions to be supported.

8. *Performance Contracting*: attempts to assure the effectiveness of a program through contracts where compensation to the contractor is contingent upon the achievement of specified performance objectives.

9. *Staff Development*: the design and conduct of appropriate training and other activities needed by a staff in order for it to accomplish its mission.

10. *Comprehensive Evaluation*: the continuous assessment and evaluation of program (project) operational and management processes and resultant products.

11. *Program Auditing*: a performance control system based upon external reviews conducted by qualified outside experts designed to verify the results of the evaluation of an educational program (project) and to assess the appropriateness of its evaluation procedures. (See separate listings for further elaboration, Accountability.)

Action Research

1. The initiation of an action, based upon tentative assumptions, which will begin to meet some critical needs "that cannot wait" and at the same time provide a significant part of the data base upon which larger scale future programs can be developed.

2. The process of carrying on research in a classroom or educational setting without the usual rigorous controls and statistical apparatus of more formal educational research, in order to establish a "real world" base, while at the same time taking positive action which coincides with the general objectives and "expected outcomes" of the research plan.

Action Steps

Specific goal-oriented activities, usually pre-determined as part of a systematic, comprehensive plan developed to accomplish a particular mission. The scope and timing of each action step is estimated as closely as possible in the comprehensive plan. (See Comprehensive Educational Plan)

Advisory Committees (See United States Office of Education Advisory Committees)

Affective Objectives (See Objectives)

Alternative Learning Strategies

Alternative routes or programs for achieving a given set of expected outcomes in contrast to the common practice in American education of presenting single strategies or approaches to the achievement of curriculum objectives. Competency-based education programs place high emphasis on the development and accommodation of a variety of alternative learning strategies within a single unit or curriculum. (See Competency-Based Education, Competency-Based Teacher Education, Performance-Based Teacher Education)

American Association of Colleges for Teacher Education (AACTE)

A national professional association dedicated to the continuous improvement of preservice teacher education programs. The Association includes over 850 colleges and universities which collectively prepare over 90 percent of the nation's teachers and other professional school personnel.

The Association is major contributor to the development of accreditation standards and has a high concern for international and multicultural education. Publications include the monthly AACTE Bulletin, the Yearbook, the Directory, and the quarterly Journal of Teacher Education.

The Association has worked closely with the Office of Education in the administration of the NDEA National Institute for Teachers of Disadvantaged Youth (which produced Teachers for the Real World [B. Othanel Smith, ed. Washington, D.C.: American Association of Colleges for Teacher Education, 1969], one of the basic resource documents of Task Force '72), the ERIC Clearinghouse on Teacher Education, the National Committee on Performance-Based Teacher Education, and a number of other important national programs.

American Association of Colleges for Teacher Education Committee on Performance-Based Teacher Education (Karl Massanari, Associate Director, AACTE, Director, PBTE Project, One Dupont Circle, Suite 610, Washington, D.C.)

Focus on training personnel regarding performance-based teacher education through developing and disseminating publications, sponsoring conferences and workshops, maintaining a PBTE clearinghouse, and disseminating information about PBTE. The Committee has broad and diverse representation from colleges and universities, teacher organizations, state departments of education, student groups, and liaison representatives from other organizations.

American Association of State Colleges and Universities (AASCU)

An Association of 288 state colleges and universities organized to improve and advance higher education. The Association serves as a vehicle for coordinated action and research programs and as a clearinghouse for information. Publishes a monthly newsletter, MEMO, in addition to special studies on timely issues.

American Federation of Teachers (AFT)

A nationwide union of classroom teachers, affiliated with the AFL-CIO. Founded in 1916, the organization now has more than a quarter-million members in over 900 locals in the United States and overseas. The AFT works to improve the quality of education and to extend the benefits of a free public school system to all teachers and pupils in the United States. Thousands of teachers have been represented by the AFT in collective bargaining agreements in New York City, Philadelphia, Washington, D.C., Baltimore, Cleveland, Chicago, Detroit, Boston, and many other cities, as well as on many college campuses. The major publication of the Federation is The American Teacher (monthly except July and August) which includes Changing Education supplement.

Assistant Secretary for Education

The officer in the Department of Health, Education and Welfare who is responsible for administering programs in the Office of Education, the National Institute of Education, and the Foundation for Post-Secondary Education.

Behavioral Modification (See Objectives #2)

Behavioral Objectives (See Objectives)

Bilingual Education Program

A program with the primary purpose of demonstrating and installing educational systems which use two languages as mediums of instruction for all or a significant portion of a child's learning experience and which place a strong emphasis upon the history and culture of the populations involved.

Bureau of Adult, Vocational, and Technical Education (BAVTE)

The Office of Education Bureau which administers programs authorized by the Vocational and Technical Act of 1968, the Manpower and Development Training Act of 1962, and the Adult Education Act of 1966. Programs are designed to support vocational education research and research personnel training programs; developmental, experimental, or pilot programs designed to meet the special vocational needs of youth and adults; demonstration projects; and the establishment and operation of state research coordinating units. In general, programs are directed at creating a bridge between school and earning a living, and at eliminating functional illiteracy among the nation's adults by expanding educational opportunities and incurring programs that will enable adults 16 years of age and older to continue their education to enable them to become more employable, productive, and responsible citizens.

Bureau of Educational Personnel Development (BEPD)

The Bureau of Educational Personnel Development of the United States Office of Education established to administer the Education Professions Development Act of 1967. Its primary goals were (1) to improve the quality of teaching and (2) to help make educational personnel training programs more responsive to the needs of the schools and colleges. It has since been replaced by the National Center for the Improvement of Educational Systems (NCIES). (See NCIES, DCD)

Bureau of Elementary and Secondary Education (BESE)

The Bureau in USOE responsible for administering most congressionally authorized programs providing support for elementary and secondary education. The largest and best-known programs in the Bureau are those under Title I, Title III of ESEA, 1965, and school assistance in federally affected areas. (See also ESEA-Title I, ESEA-Title III, U.S. Office of Education)

Bureau of Higher Education (BHE)

The Bureau which administers programs of financial support to institutes of higher education for loans and grants to students, services for disadvantaged students, construction of facilities, initiation or expansion of programs of extention and continuing education, aid to developing institutions, graduate centers, fellowships, and the improvement of graduate education; conducts such analytic and interpretative studies as are necessary to identify un-met needs in higher education; evaluates the effectiveness of existing higher education programs; and otherwise aids in improving the quality of American higher education opportunities for qualified individuals. (See U.S. Office of Education)

Career Education

Education aimed at preparing people of all ages to relate better to the world of work and, ultimately, to be more productive, well adjusted citizens. A fundamental goal of career education is its intention to provide legitimate motivation for all learning, especially through relating academic foundations to career aspirations. It seeks to acquaint young children with career choices and to help young adults to make those choices early enough to prepare for them. This is done through educational programs which provide sound occupational information in progressive, broadening, deepening stages, giving students a full perspective regarding where they might fit into the modern employment scheme. Ideally, such programs give students an early appreciation of the world of work and actual experience in work at secondary schools; they foster an excitement about eventually becoming a full participant in that world; maximizing students' future options, and giving them a sense of control over their lives.

Career Opportunities Program (COP)

Initiated in 1970 and administered by BEPD (now NCIES), COP emphasis on better education for low-income children. It has opened up new careers for the disadvantaged and promoted noteworthy increases in student motivation. Specifically, COP is dedicated to the idea that the public education offered to children of low-income families can be improved significantly by reaching into the neighborhood to enlist talented, dedicated adults to serve as educational auxiliaries in the classroom, in the school library, in media labs, and in home-school counseling relationships and by enabling those persons to achieve full accreditation as teachers. The program particularly seeks to attract men into the classroom; many of the aides enlisted to date are Vietnam veterans.

COP projects are developed in close cooperation with state and local education agencies and most include additional program relationships with federal programs such as the Teacher Corps, Head Start, OEO Community Action Programs, Title I of the Elementary and Secondary Education Act, Model Cities, and the Neighborhood Youth Corps.

Civil Rights Compliance

The statement of agreement that requires elementary and secondary schools and school systems, institutions of higher education, and the Department of Health, Education and Welfare to comply with Title VI of the Civil Rights Act of 1964 and HEW Title VI regulations. The Department accepts three types of assurance of compliance with Title VI:

1. A written assurance from school systems, subject to a final order of a court of the United States for the desegregation of their schools, that they will comply with court's order;
2. A written assurance from school systems eliminating a dual school structure under a voluntary desegregation plan; and
3. A signature to the compliance statement from all other schools and school systems and colleges and universities.

Clinical Professor

A college faculty member who works with local educational personnel, usually in the schools and in relation to "ongoing" education programs. Sometimes clinical professors supervise student or intern teachers, but increasingly, they are working directly with regular, in-service school staffs.

Cognitive Objectives (See Objectives)

Collaborative Decision Making (See Parity)

Committee for Full Funding

A committee of educational leaders and lobby groups that was formed with the purpose of working toward having final budgetary appropriations as close as possible to the top budget authorizations set for education legislation.

Committees, Commissions on National Education Reform (See Appendix B)

Committee on National Program Priorities in Teacher Education (CNPPTE) Task Force '72 "Outside Track"

A resource team of "experts" from the field of education, organized to work along with, but independently of, Task Force '72 in developing recommendations regarding certain new educational thrusts and their relationship to national educational reform. Consultants were drawn from all levels of the educational spectrum and included persons who have had considerable experience in one or more of the programs under study. The resource team helped insure a much broader and more objective viewpoint in the efforts of Task Force '72. (See also Task Force '72)

Community

1. Those private and public constituencies within the legal territory of a school system (parents, neighbors, business, industries, chamber of commerce, city council, churches, and other organized groups) which support and are ultimately responsible for the quality of the educational program of that school system and whose children are the direct consumers of the education offered.

2. Leaders from the private sector (usually representatives of the disadvantaged minorities) who may or may not be related to a particular school community or organization, but who, through their experiences and works, have become important spokesmen for the concerns of people in local communities. (See also Parity)

Community Involvement

The direct involvement of members of concerned communities in appropriate phases of educational program activity to facilitate (1) effective utilization of community resources; (2) community understanding of program objectives, procedures, and accomplishments; and (3) the delegation of program responsibilities to relevant community client, service, and support groups.

Community-Liaison Teacher (See School-Community Liaison Teacher)

Competency-Based Education

1. A system of education which places high emphasis on the specification, learning, and demonstration of those competencies which are of central importance to the effective practicing of a given profession or career.

2. A term used by some to identify the current national movement in "competency-based education and certification." The term has two outstanding advantages:

   a. it encompasses all major educational constituencies; and

   b. it includes all of the professions, e.g., education, law, medicine.

(See Competency-Based Teacher Education, Performance-Based Teacher Education)

Competency-Based Teacher Education

1. A system of teacher education which has its specific purpose the development of specifically described knowledge, skills, and behaviors that will enable a teacher to meet performance criteria for classroom teaching. Presumably, each competency attained by the preservice teacher is related to student learning and can be assessed by the following criteria of competence:

   a. knowledge criteria that assess the cognitive understandings of the teacher education student;

   b. performance criteria that assess specific teaching behaviors; and

   c. product criteria that assess the teacher's ability to examine and assess the achievement of his or her pupils.

2. Any teacher education program having the following characteristics:

   a. Competencies (knowledge, skills, behaviors) to be demonstrated by the student which are:

      1) derived from explicit conceptions of teacher roles,
      2) stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
      3) made public in advance.

   b. Criteria (to be employed in assessing competencies) are:

      1) based upon, and in harmony with, specified competencies,
      2) explicit in stating expected levels of mastery under specific conditions, and
      3) made public in advance.

c. Assessment of the student's competency:

   1) uses his performance as the primary source of evidence;
   2) takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior; and
   3) strives for objectivity.

d. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completed.

e. The instructional program is intended to facilitate development and evaluation of the student's achievement of specified competencies.

[Stanley Elam, "Performance-Based Teacher Education: What Is the State of the Art?" Washington, D.C.: American Association of Colleges for Teacher Education, 1971.]

Comprehensive Educational Plan

1. A detailed description of a proposed educational program consisting of all its systems, subsystems, and components accompanied by an explanation of its mission, goals, and objectives--a required approach for almost all United States Office of Education programs.

2. A plan which considers the broadest possible range of variables in development of an educational program. (See Needs Assessment, Resource Assessment, Strategy, PERT, Evaluation, MBO, Action Steps)

Comprehensive Services (Also called Life Services or Supportive Services)

All of the health services--including medical and dental work as well as nutritional services--and those other "umbrella" services that relate to a person's physical and mental well-being that are included in some school programs but do not directly develop a student's cognitive skills.

Computer Assisted Instruction (CAI) (Sometimes called Computer Based Instruction)

Instruction based upon the use of a computer--usually a terminal component--which makes it possible to provide the learner with an individualized and self-paced program. This kind of instruction has been most widely used in mathematics and the physical sciences but is slow by gaining popularity with all subject areas.

Confirmatory Mechanisms

Cybernetic feedback instrumentalities which utilize measurable data to provide continuous verification of the relative effectiveness of

different components or activities in comprehensive educational systems. These mechanisms provide the continual feedback information necessary to make appropriate adjustments to program components and provide a basis for determing the extent to which the criteria for accountability have been satisfied. (See Feedback Loop, Field Response Mechanisms)

Confrontation

In educational contexts, an open meeting and discussion of educational issues, practices, and policies to provide better communication between educational constituencies previously isolated from one another. This approach has been an especially effective one for bringing into the active educational world those groups who were previously excluded from the decision-making process. The practice of confrontation has not only broadened the base of participation in the educational arena, but has resulted in the kind of open and critical educational atmosphere that is in keeping with the democratic principles upon which American education is ideally based.

Consortium

An organizational instrumentality, usually informal, which facilitates coöperation, e.g., among colleges and universities, professional organizations, the community, and the schools. The consortium provides a means for engaging the full resources of federal, state, and local educational agencies, and business and community interests in improving education.

Consumer Center

In Title I and Title III programs of the Office of Education, a site that receives a proven practice or process, as well as the technical advice necessary for successful implementation, from a Producer Center. (See also Producer Center)

Continuation Grant

A grant to continue an operational program for another year. Although federal support for multiple-year programs is becoming increasingly common (usually ranging from 3-5 years in length), the nature of the legislative and funding process often makes it necessary to apply for program continuation on a year-to-year basis. This type of grant application generally requires assessment of the previous year's performance, as well as a rationale for requested program changes and improvements. (See also Planning Grant, Operational Grant, Qualification Grant)

Cost Benefits

The specific benefits or achievements that result from specific program expenditures. As with "cost effectiveness," in educational planning and development, increasing emphasis is being placed upon comparing a range of program strategies regarding the kinds of incomes that can be reliably estimated to occur as a result of certain specific monetary inputs. (See Cost Effectiveness)

Cost Effectiveness

Analyses designed to measure the extent to which resources allocated to a specific objective under each of several alternatives, actually contribute to accomplishing that objective, so that different ways of gaining the objective may be compared. (See Cost Benefits)

Council of Great City Schools

An association of administrators responsible for public education in America's large urban centers (cities larger that 300,000 or school districts with enrollments in excess of 70,000 students). The Council is designed to promote the improvement of education by providing a central information exchange for urban educators.

Member cities:				
	Atlanta	Dallas	Milwaukee	Portland
	Baltimore	Denver	Minneapolis	San Diego
	Boston	Detroit	New York	San Francisco
	Buffalo	Houston	Oakland	St. Louis
	Chicago	Los Angeles	Pittsburgh	Washington
	Cleveland	Memphis	Philadelphia	

Council of Chief State School Officers (CCSSO)

An independent organization of state superintendents and commissioners of education representing all 50 states and six outlying areas. The Council provides a means for cooperative action among its members to strengthen education through the work of state education agencies and aids its members to meet their responsibilities for leadership in education. CCSSO Stateline, published quarterly, summarizes the Council's position on current issues in education and trends in state education agencies.

Critical Mass

The minimum essential mass needed to get something accomplished. Processing sufficient power to make a difference. The minimum concentration of funds, people, or institutions necessary to afford a new program or system an adequate opportunity for success. Many programs directed at

educational reform have failed because their support has had an insufficient "critical mass" with which to provide a valid demonstration model or with which to significantly interact with and change existing institutions and systems.

Cultural Pluralism

Co-existence of two or more groups with significantly different patterns of belief and behavior (including, as the case may be, different languages) within the same national boundaries and with mutual respect, toleration, and encouragement. The Amish are an example of cultural pluralism in the United States. Developing an awareness of this pluralism and an understanding of its vital role in our culture has been a central objective of Office of Education programs, e.g., the Teacher Corps, TTT, COP, and Urban-Rural School Development.

Cutting Edges of Educational Knowledge

New ideas and practices in education built upon sound research and validated products and processes which have potential for successfully obtaining the target goals and objectives of improved teaching and learning.

It has been estimated that the lag between the frontier of knowledge and its use in some classrooms is approximately 30 years. If the whole of our knowledge base also has a "complete turnover" in about 10 years, it could be hypothesized that what is taught in the classroom is always three generations behind the best of what we brew.

Delivery System (Delivery Mechanisms)

A means, vehicle, or system which facilitates the rapid and effective introduction of validated research products into the mainstream of the American educational system. Any systematic arrangement for disseminating educational products to the client. Teacher centers, workshops, institutes, conferences, and publications can be vehicles for delivery of new ideas, techniques, and materials to the educational consumer. (See Consumer Center, Local to Local Delivery, Producer Center, Portal School, Teacher Center)

Deputy Commissioner for Development (DCD) (See Office of Deputy Commissioner for Development)

Development

The systematic generation of technology and techniques (curriculums, procedures, software, hardware, materials, alternative frameworks) for use in bringing about a particular outcome or in performing a particular operation in educational programs.

Development Program (See Program Types)

Developmental Assistance

A form of technical assistance characterized by the provision of outside resources, customarily at an early stage, to upgrade the quality of educational programs. In this form of assistance the outside resource or catalyst becomes more a part of the developmental process than "a hit and run" troubleshooter. (See also Technical Assistance)

Differentiated Staffing

The assigning to educational personnel of roles or tasks according to experience and ability, and the rewarding of personnel according to the level of educational activity assigned. Such staffing patterns include various task levels: master teacher, full responsibility teacher, limited responsibility teacher, paraprofessional, aide, volunteer assistant, and student. Differentiated staffing patterns also may include academic teams differentiated by area of expertise. The staff differentiation approach allows specialization in keeping with specific competencies of the staff.

Diffusion

The process of spreading new relevant ideas and practices over a particular area or region. (See Dissemination, Delivery)

Disadvantaged

Persons, institutions, or areas lacking some of the advantages of other groups or places. Various criteria are used to determine the degree of disadvantage: state and national income averages, welfare recipient data, amount of education, degree of exposure to variety of experiences, availability of social and economic opportunity.

Discrepancy Evaluation (See Evaluation)

Discretionary Funds

That portion of an appropriation which may be used "at the discretion" of an agency for specified purposes but without formula restrictions.

A relatively small percentage of Office of Education funds (less than 10 percent) are not controlled by pre-determined formulas, but this relatively small amount of discretionary money can be used in a great variety of ways by the Commissioner to respond to the most critical needs of the nation's education systems. (See also Formula Grants)

Dissemination Review Panel

Established by the Office of Education to develop and apply criteria for the selection of exemplary or validated OE-supported programs or practices before their dissemination. The panel presently uses the following terms to indicate increasing levels of evaluation rigor:

1. *Promising*: programs or practices that show potential for producing effective results, convincing test data are lacking; or, there is not an adequate number of similar programs with which to compare the selected program as a way of demonstrating its "promising" characteristics.

2. *Model*: programs or practices judged to be among the most effective programs of their type based on expert comparisons among "nominated" successful program, but for which convincing evaluation data are still lacking.

3. *Validated*: research-based programs or practices that have been independently verified as consistently produced expected results, usually based on field experimental designs.

(See Validated Products and Processes)

Division of Education

One of the divisions of the Department of Health, Education and Welfare, headed by the Assistant Secretary for Education who is responsible for administering programs of the United States Office of Education, the National Institute of Education, and the Foundation for Post Secondary Education. (See United States Office of Education)

Drop Out Prevention Program

Authorized by Title VIII of the Elementary and Secondary Education Act and administered by the Office of Education, the drop out prevention program geared to demonstrate projects involving the use of innovative methods, systems, and materials which show promise in reducing the number of children who do not complete education in elementary and secondary schools.

Educational Media

All activities whereby consultative assistance is provided to local and intermediate staff members in the organization with use of all teaching and learning resources, including hardware, content material, and services.

Educational media are defined as any devices, content materials, methods, or experiences used for teaching and learning purposes. These media are printed or nonprinted sensory materials.

Educational Reform

The implementation of changes in educational programs and practices to make them more responsive to the needs of the population served.

Educational Renewal

The improvement of existing educational systems from within. Efforts at federal, state, and local levels to improve existing educational systems through comprehensive reform programs which are planned, developed, implemented, and evaluated by those who will be most affected by the reforms. Although outside resources could and generally would be utilized to supplement local resources, the major focus of educational renewal programs would be upon finding more effective ways of using already existing resources. High priority would be given to the application of educational systems approaches, including comprehensive long-range planning, continuous needs assessment, targeted programming and feedback, and evaluation mechanisms.

Educational Revenue Sharing (See Revenue Sharing)

Educational Technology (See Educational Media)

Educational Testing Service (ETS)

A nonprofit organization whose activities are centered on four major educational areas: measurement, research, development, and advisory and instructional services. ETS creates and administers measurement programs in the form of aptitude and achievement tests that are taken each year by millions of individuals--including a great range of both students and nonstudents. The organization research effort spands the educational spectrum and is about the nation's largest. The main office of ETS is located in Princeton, New Jersey, with branches located in Berkeley, California, and Evanston, Illinois.

Educational Voucher

A certificate with a given monetary value--usually given to a student in need of financial assistance--that can be used to enroll in an educational program of the student's choice. It is generally felt that such a system has at least three important advantages: (1) provides an effective mechanism for giving economic aid to the poor; (2) allows the student to choose from a broad range of programs; and (3) stimulates institutions in "competition" for voucher students to upgrade their offerings.

Elementary Models (Comprehensive Elementary Teacher Preparation Models)

Designs and specifications for some alternative, systematic, educational programs for elementary school teachers. Ten such models were designed and given initial feasibility tests during 1968 and 1969 with funding from the National Center for Educational Research and Development (NCERD) of the Office of Education. These models focus on institutional realignments, comprehensive planning, training for specific competencies, field-centered training activity, modularized and personalized training programs, a merger of pre- and in-service training, the use of systematic management techniques, and an emphasis on cost effectiveness. Each project includes exemplary competency-based teacher education programs for preparing teachers, with detailed specifications for the teaching competency to be acquired and for each of the numerous related subsystems and components of the proposed programs. Specifications for these models and feasibility studies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. (See Model: Teacher Education)

Elementary-Secondary Education Act--Title I

Authorized by Title I of the Elementary-Secondary Education Act of 1965 and administered by the Office of Education, this program provides funds on a formula basis directly to school districts with concentrations of children from low-income families to expand and improve educational programs by various means (including pre-school programs) which contribute particularly to meeting the special educational needs of educationally deprived children.

Elementary-Secondary Education Act--Title III

Authorized by Title III of the Elementary-Secondary Education Act of 1965 and administered by the Office of Education, this program provides federal financial support for special innovative and exemplary projects which hold promise of making a substantial contribution to the solution of critical educational problems. At least 15 percent of the funds available in states under this program must be used to meet the special educational needs of exceptional children. Eighty-five percent of the ESEA Title III funds is administered by the state departments of education; the balance by the Office of Education. (See also Bureau of Elementary and Secondary Education, Exceptional Children)

Emergency School Assistance Program (ESAP)

The Emergency School Assistance Program I (fiscal year 1971) and II (fiscal year 1972) designed to meet the special needs of school districts which arose as a result of desegregation either under court order or voluntary plans filed under authority of the Civil Rights Act of 1964, Title VI. The purpose of ESAP is to assist all eligible school districts to eliminate racially isolated schools; to provide financial assistance for the establishment of stable, quality integrated schools;

to eliminate minority group isolation within the school districts; and to aid children in overcoming educational disadvantages occasioned by minority group isolation within the district.

Enabling Objectives (See Objectives)

Equalization of Educational Opportunity

The goal of providing equal educational opportunities for all children, regardless of their race, color, national origin, or economic background.

ERIC (Educational Resources Information Center)

A national system of decentralized educational clearinghouses which identify the literature most needed by practitioners, researchers, and decision-makers; secure, abstract, index, and announce the contents and availability of literature selected; commission and publish analytical-interpretive monographs as well as bibliographies, directories, and substantive articles; and provide direct information services to educators. Basic publications of the system include the Thesaurus of Educational Descriptors, Research in Education, and Current Index to Journals in Education. Major funding is provided by Central ERIC of the National Institute of Education. Local sponsors include universities and professional association. Further information about the system can be obtained by writing to ERIC, National Institute of Education, Code 401, Reporters Building, Washington, D.C. 20202.

ERIC Clearinghouse on Teacher Education

One of eighteen ERIC speciality centers supported by the National Institute of Education, the main job of the ERIC Clearinghouse on Teacher Education is to provide ideas and information on both the pre- and in-service preparaton of teachers and other supporting school personnel. The scope of the ERIC Clearinghouse on Teacher Education includes the preparation and continuing development of elementary, secondary, and collegiate level personnel, their roles and functions. Health, physical education, and recreation is a newly added part of its scope.

Other ERIC Clearinghouses:

Adult Education
Syracuse University
Syracuse, New York

Counseling and Personnel Services
University of Michigan
Ann Arbor, Michigan

Disadvantaged
Teachers College
Columbia University
New York, New York

Early Childhood Education
University of Illinois
Urbana, Illinois

Other ERIC Clearinghouses (*Con't*):

Educational Management
University of Oregon
Eugene, Oregon

Educational Media and Technology
Stanford University
Stanford, California

Exceptional Children
The Council for Exceptional Children
Arlington, Virginia

Higher Education
George Washington University
Washington, D.C.

Junior and Community Colleges
University of California
Los Angeles, California

Languages and Linguistics
Modern Language Association of America
New York, New York

Library and Information Sciences
American Society for Information Sciences
Washington, D.C.

Reading and Communication Skills
National Council of Teachers of English
Urbana, Illinois

Rural Education and Small Schools
New Mexico State University
Las Cruces, New Mexico

Science, Mathematics, and Environmental Education
Ohio State University
Columbus, Ohio

Social Studies/Social Science Education
University of Colorado
Boulder, Colorado

Tests, Measurement, and Evaluation
Educational Testing Service
Princeton, New Jersey

Vocational and Technical Education
Ohio State University
Columbus, Ohio

Evaluation

The systematic generation of statistical, descriptive, and analytical information on program (project) activities. Evaluation facilitates decision-making in a specific context within a given time frame:

1. *Discrepancy Evaluation*: a method of assessing the gap between explicit promise and systematically assessed performance of a set of activities. The discrepancy between stated goals or expected outcomes and actual results is a measure of the effectiveness of program activities and is a way of pinpointing the areas of both strength and weakness in program design.

2. *Formative Evaluation*: the ongoing assessment of the efficacy of a program during its development and implementation in terms of the degree of accomplishment of prestated goals and objectives. The observation, analysis, and interpretation of indicators of progress toward specified program objectives provide the

justification and direction for revision of programs while still in their developmental phase. The consequence of formative evaluation is a better product or program in a shorter time.

3. *Process Evaluation*: a procedure of assessing means. Generally, evaluation calls for the measurement of performance against the standard or level specified in the objectives. Process evaluation assesses the effectivensss of the processes undertaken in achieving objectives. Most evaluation of national education programs in recent years has been of this type.

4. *Product Evaluation:* product or impact evaluation assessing the capability of a product to bring about intended changes specified by the goals (objectives) of product use. The increasing demands for greater accountability in education programs have generally called for more of this type of evaluation.

5. *Summative Evaluation*: the assessment of final product and process effectiveness in terms of degree of attainment of prespecified program goals and objectives.

Exceptional Children

Exceptional children refers to the wide range of children and youth who have special educational needs as the result of physical, emotional, social, mental, and/or other limitations which result in learning or behavior problems in the educational setting. The term applies equally to children who are so gifted that the fullest development of their ability to learn requires special educational techniques.

Expected Outcomes

Intended behavioral changes as opposed to unintended changes. When applied to human behavior, expected outcomes must be considered jointly with unexpected outcomes, both of which follow behavioral intervention. That which one hopes to achieve through the implementation of a system may be expressed as goals and objectives. "Goals" tend to be used for larger, generic concerns and "objectives" for more precise delineation of expectations. (See also Output-Oriented Program)

Experimental Model

A design for conducting a program or series of educational activities for which the empirical base is not secure, or, at least, for which there are major gaps in knowledge and which seeks to produce both desirable instructional results and a broadening of solid data, which may be used later for empirical models. A model built on at least partial hypothetical ground, but usually in areas requiring some action to meet learner needs.

A program or educational system which is scaled down in size, can be modified easily, and can be studied for application to larger programs or systems. (See Action Research)

Experimental Program (See Program Types)

Experimental Schools Program

Authorized by the Elementary and Secondary Education Act and administered by the Office of Education, the Experimental Schools Program is intended to test comprehensive alternatives, to present educational practices, procedures, and performance. By supporting a limited number of large-scale, comprehensive experiments with a major focus on documentation and evaluation, Experimental Schools will attempt to serve as a bridge from research, demonstration, and experimentation to actual educational practice.

Federal Mission in Education

The fundamental mission of the United States Office of Education and of other federal educational agencies is to administer programs authorized by Congressional legislation. These programs generally have five major purposes:

1. to provide information and statistics about the state of education in the United States;
2. to promote interstate cooperation and sharing of educational experience;
3. to respond to emergency situations related to the national welfare;
4. to support experimentation and demonstration programs that are in the best interest of improving American education but which cannot be afforded by local and state education agencies; and
5. to provide developmental, nationwide assistance in the installation of large-scale service programs growing out of 4 and/or 3 above.

Federal Register Announcement

The legal announcement of conditions governing the awarding of federal funds. With specific reference to the enabling legislation, it sets forth the rules, regulations and/or guidelines affecting the program and specifies certain significant deadline dates. Federal Register Announcements appear twice and serve two purposes. The first announcement gives interested parties an opportunity to react to the regulations (through the U.S. Commissioner), to raise questions, and to recommend improvements. The second announcement, generally modified as a result of both internal and external input, serves to notify interested parties

that the regulations are in force. Single copies may be obtained from the Office of Federal Register, National Archives, 8th and Pennsylvania Avenue, N.W., Washington, D.C. 20408. Subscriptions may be obtained from Superintendents of Documents, Government Printing Office, Washington, D.C. 20402. (See Guidelines, Regulations)

Feedback

A way of giving help; a corrective mechanism for learning how well behavior matches intentions. Some criteria for useful feedback are:

1. It is solicited rather than imposed. Feedback is most useful when the receiver has formulated the kind of question that those observing him can answer.

2. It is descriptive rather than evaluative. Be describing one's own reaction, it leaves the individual free to use it or to not use it as he sees fit. By avoiding evaluative language, it reduces the need for the individual to react defensively.

3. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as saying something like, "just now when we are deciding the issue upon _____ you did not listen to what others said, and I felt forced to accept your arguments or face attack from you."

4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he has no control.

5. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender has in mind.

(See Confirmatory Mechanisms, Feedback Loop Mechanisms, Field Response Mechanisms)

Feed-back Loop Mechanisms

Processes built into programs to provide systematic and regular feed-back regarding quality and effectiveness. Such processes not only provide an opportunity for all program participants to have an ongoing input into program development, but also provide the data base that is necessary to make regular adjustments in program strategies and operations. (See Confirmatory Mechanisms, Feedback, Field Response Mechanisms, Formative Evaluation)

Field Response Mechanisms

Procedures used by governmental agencies to obtain the response of practitioners in the field when developing new state, regional, or national programs. Generally, the approach has four steps: (1) the prior development of a conceptual frame for a proposed new program based upon inputs from a variety of sources, including the field; (2) the presentation of that plan to a cross-section of field constituencies (meeting in both homogeneous and heterogenous groups and, if possible, in their home environments) for input, reaction, modification; (3) the implementation of the plan as modified (the installed plan would always include a mechanism to insure ongoing feed-back from the field to the administrative agency); and (4) the evaluation of both the program and the particular field response mechanisms employed in relation to its development. (See Confirmatory Mechanism, Feed-back, Feed-back Loop Mechanism)

Field Task Forces on Improvement and Reform in American Education

A national cross-section of pacesetters from the major constituencies of American education--teachers, state education departments, the community, school administration and supervision, higher education, and spokesmen for the basic subjects taught in the schools--established by the National Center for the Improvement of Educational Systems to provide "real world" input into the development and improvement of major national educational programs. Recommendations of the Task Force will be published in early 1973. (See Bibliography)

Field Test

To introduce a new educational program or approach into a "regular" educational setting with the purpose of testing the new product under real conditions. Field tests are used primarily to help improve or "perfect" a product being developed or to measure the validity or effectiveness of a finished product. (See Evaluation, Program Types)

Fiscal Determinators

1. *Authorization*: the process of establishing as law a proposed bill with a spending ceiling.

2. *Appropriation*: the process of establishing a given money expenditure within an authorized ceiling.

3. *Allocation*: an administrative procedure of releasing monies available under an enacted appropriation.

Follow Through

Authorized by the Economic Opportunity Act of 1964 and administered by

the Office of Education, an experimental program with the purpose to investigate a variety of approaches to reinforce gains made in Head Start or similar pre-school programs by children from impoverished families. Provisions also are made for assessing abilities and gains of such children who have not had pre-school experiences. Twenty-two different models of Follow Through are being tried, most at several sites. Each model is designed, implemented, and monitored by a sponsoring group. Currently, there are approximately 150,000 children from impoverished families who have attended pre-school. Children from similar backgrounds could no doubt benefit from successful compensatory Follow Through efforts. Approximately 4 million such children enrolled in kindergarten through third grade.

Formative Evaluation (See Evaluation)

Formula Funds

Program monies that are allocated according to a specific formula which is usually based upon some defined demographic, political or geographic unit which is usually of high importance to national program goals and objectives. For example, a high percentage of funds, authorized by Congressional legislation, is distributed to the states on the basis of the ratio of school-age population within each state, and then, the states, in turn, distribute those funds to local school systems on the basis of state-wide formulas and funding practices. (See also Discretionary Funds)

Foundation for Post Secondary Education

National Foundation for Post Secondary Education, proposed by the Senate as one of three organizational components of an Education Division within the Department of Health, Education and Welfare. The other two would have been a National Institute of Education and the Office of Education. A conference committee agreed to, and Congress subsequently enacted in the Education Amendments of 1972, a provision creating an Assistant Secretary for Education. The Commissioner of Education and the Director of a newly created National Institute of Education will report to the Assistant Secretary.

"Gate-Keepers"

Persons in leadership situations who have a high degree of influence on decision-making and therefore on the structure and quality of the educational process and in the ultimate decision-making deliberations. This influence comes from the authority of the particular position that the person holds or from the degree of impact a person has on his or her peer through personal contacts, speeches, or writing. (See Multiplier Effect)

Goal

A statement in broad, descriptive terms of the desire and expectations of the desires and expectations of the developers and/or consumers of an educational program. (See also Expected Outcomes, Objectives)

"Governance" Council

A group of community leaders responsible for the policy administration of a particular educational program or system. The Council differs from the usual school board by being more closely representative of the parents--particularly members of minority ethnic groups--of pupils in the school or schools involved in the program and is a means of assuring a greater degree of community involvement and control.

Increasingly, governance councils are becoming more diverse in their membership and, as a result, are becoming more representative of the various constituencies involved in the program or system which they govern. (See also Parity)

Guidelines (See Program Guidelines)

Hands-on Resource Center

A resource center which is designed to invite visiting educators to "get their hands dirty." Rather than merely looking at displays or demonstrations of materials, equipment and new educational systems, teachers and others using the center become active learners by using the materials, methods, and programs contained in the new and constantly changing center resources. These learning sessions are designed for both individuals and groups and range from short-run "get acquainted" experiences to long-run "fully familiar" credit courses. (See also Teacher Center)

Hardware

Equipment or material necessary to the carrying out of educational programs that is characterized by its non-print, non-paper nature. Such equipment includes projectors, laboratory equipment, computers, artifacts, measuring devices, and other fashioned materials. Hardware is usually less expendable and more costly than software, and less amenable to swift revision. (See also Software)

High Risk Programs

Programs generally based upon a thin knowledge base which do not have a predicted good chance of succeeding, but which (1) offer a high potential payoff should they succeed; (2) relate to extremely critical problems, e.g., drug education; or (3) are experimental in nature, e.g., use of new staffing patterns. Such programs are usually funded at relatively low levels. (See also Experimental Programs)

Individualized Instruction

Instructional activities designed to attend to expressed needs of the individual learner, taking into account each learner's accumulated knowledge, skills, and attitudes, his potential and his rate of learning. Programmed materials are often appropriate for individualized instruction. (See Personalized Instruction)

In-Service Education

Efforts to update and increase or improve the knowledge base, professional skills, attitudes, sensitivities, and feelings which contribute to the effective performance of "on the job" educational personnel. It usually involves a formal program, but many teachers feel that the best in-service education comes from the students and continues from the first to the last day of active service. (See also Preservice Education)

Institute of International Studies (IIS)

The Institute of International Studies of the Office of Education, a combined operating and staff unit, responsible for planning and administering a variety of opportunities and programs to expand and improve the international dimensions of American education. The Institute's various programs are designed to develop at least a suitable minimum national educational capability to produce the skilled manpower, new knowledge, and improved curricula and instructional materials in foreign languages, area studies, and world affairs needed by education, government, and business.

Institution of Higher Education (IHE)

A post-secondary institution, usually a college or university, responsible for creating and promoting organized bodies of knowledge, study, and application--especially in professional fields; a community of scholars and researchers; a social invention to study and to enhance the culture; a place where knowledge and disciplined competence is created and translated into social utility in collaboration with other institutions, organizations, and enterprises. There are an estimated 2,500 such institutions in the United States.

Instructional Modules (See Module)

Instructional Technology (See Educational Technology)

Integrating Materials

Packaged sets of instructions and suggestions known to be effective in

enabling prospective teachers to demonstrate their ability to bring about desired learning outcomes in pupils, develop a particular curriculum segment, design a particular evaluation scheme, or perform other tasks related to learning and teaching. Outcomes of this kind are always situation-specific, e.g., the realization of pupil outcomes always pertains to a specific outcome, or set of outcomes, for a specific child, or set of children, under a specific set of learning conditions; and the development of curriculum always pertains to the statement of goals, objectives, learning experiences, and the like for a specific body of knowledge for specific sets of children under specific sets of learning conditions.

Practice and corrective feed-back are critical to the development of such competencies, and a large proportion of the "packaged" integrating materials describe strategies and suggestions relative to the pursuit of such activities. (See also Protocol Materials, Training Materials)

Interaction Analysis

A process of objectifying verbal and nonverbal behavior between individuals in small or large groups. It has been especially important in the analysis of the teacher-student relationship. Of the more than one hundred instruments that have been developed for use in interaction analysis the Flanders' Interaction Analysis Categories (FIAC) is probably the most widely used.

Inter-Agency Programs

Those educational activities characterized by cooperative planning, joint funding and coordinated execution among several agencies. For example, Teacher Corps programs require the cooperative development of programs by the local education agency, the Model Cities Leadership, an institution of higher education, the state education agency, the Office of Education, and where appropriate, additional agencies such as Model Cities or the Bureau of Indian Affairs. (See also COP)

Intervention Strategy

A planned act or series of acts introduced into a program or situation with the purpose of improving or changing that program or situation.

Laboratory School

An elementary or secondary school generally attached to and administered by an institution of higher education with the primary purpose of conducting research in learning, curriculum, and teaching methodology. It can also serve as a close and relatively controlled center for practice teaching. (See also Portal School)

Leadership Training Institute (LTI)

A unique and flexible human resource pool created and sponsored by the Office of Education and charged with providing high level training experiences for project directors and other key leadership personnel in NCIES programs. The LTI usually has a central training staff composed of a cross-section of educational leaders who have had considerable experience with either the USOE program, with which they are associated, or other programs with similar or related purposes. This central staff has the capacity to draw upon other "outside" training resources as needed. Twelve LTI's are currently in operation under the aegis of the Office of Education.

Learning Disability

An individual, physical, or emotional handicap which makes learning more difficult than it would be if such a handicap did not exist. Estimates for children with specific learning disabilities, as noted in a 1969 report of the National Advisory Committee on the Handicapped, include 1 to 3 percent of the school age population (5-19), i.e., 600,000 to 1,800,000.

Liaison Teacher (See School Community Liaison Teacher)

Life Services (See Comprehensive Services)

Local Education Agency (LEA)

A public school district in system empowered by the state in which it is located to carry out the mandate of providing free public education. There are presently approximately 20,000 such districts in the United States.

Local to Local Delivery

The sharing of successful educational products and practices at the local level--from teacher to teacher, classroom to classroom.

Long Range Planning

The effort to establish over a specified period of time realistic and desirable goals which conform to the criteria of cost-benefit feasibility, sequential PERTing of activities, and the successive steps of sub-goals required to achieve the desired mission. Five years is the most commonly used long-range planning time span.

Management by Objective (MBO)

The directing of planning and implementation operations on the basis of the philosophy, strategies, and outcomes specified explicitly in prestated objectives of an organization. An educational program managed by objectives demands, for example, that instruction be carried out on the basis of explicit and coordinated sets of objectives. (See also Objectives, Expected Outcomes)

Materials (See Integrating Materials, Protocol Materials, Software, Training Materials)

Micro-teaching

A relatively new approach to teacher training, a combination of a conceptual system for identifying precisely specified teaching skills with the use of video-tape feed-back to facilitate growth in these teaching skills. Generally organized around small groups of students, micro-teaching gives high emphasis to learner involvement and regular and rapid feed-back from peers and supervisors. The approach is central to the mini-course programs developed at the Far West Regional Educational Laboratory. (See also Mini-Course)

Mini Course

1. A specific set of learning experiences, often self-instructional, designed to teach a single skill or a cluster of related teaching skills in a relatively short period of time. Micro-teaching, self-analysis, and reteaching are typical elements in each unit.

2. A line of instructional products produced at the Far West Laboratory for Educational Research and Development, Berkeley, California.

Model Cities Site

A location, usually in a low-income area of a large city, in which the community members elect to define their corporate activities for change within the guidelines for renewal set forth by the Model Cities legislation which is administered by the Department of Housing and Urban Development (HUD). The Model Cities Program brings to bear all of the local and federal resources in a coordinated plan of action to solve urban problems in that site.

Model: Teacher Education (See Teacher Education Model)

Module

A package of integrated materials or an identifiable and related set or sequence of learning activities which provides systematic guidance through a particular learning experience or specific program. Competency-based educational programs generally base their instructional content on modules. Modules are of many shapes and styles and may require activities ranging in time from less than an hour to a year or more. Typically, modules include rationale, prerequisites, objectives, strategies, resources, and criteria tests. The use of modules allows a much greater variety of experiences than standard "courses" and provides a far better basis for personalized instruction. (See also Integrating Materials, Mini Course, Protocol Materials, Training Materials)

Monitor (See Project Monitor)

Multiplier Effect

More "bang for the buck." A predicted consequence that exceeds in impact and times the energy of original input. Attained by dealing with persons, institutions, or organizations promising the greatest possible influence vis-a-vis other persons, institutions, or organizations, e.g., programs for administrators and supervisors, programs located at prestigious and/or high visibility institutions, programs with specific built-in strategies for teams of participants to "reproduce" their training experiences for many others through well-planned follow-up activities. (See Gate-Keepers)

Multi-States Consortium on Performance Based Teacher Education
(Theodore Andrews, Director, Division of Teacher Education and Certification, New York State Department of Education, 99 Washington Avenue, Albany, New York)

A consortium of eight states in the fore of the competency based education movement which is concerned with the implications of CBE for state certification and training programs, with inter-state sharing of information, materials and personnel, and with helping member states to develop management systems for the development and use of performance-based approaches to teacher education and teacher certification.

National Assessment Program

National Assessment of Educational Progress, a program sponsored by U.S. Office of Education and carried out by the Education Commission of the States to measure, at intervals of five years, concerning what young people know, can do, and understand in each of ten broad field of learning: science, writing, citizenship, reading, literature, music, social studies, mathematics, career and occupational development, and art. Surveys to assess performance by 9-year olds, 13-year olds, 17-year olds, and young adults (ages 26-35) are conducted in two fields each year.

National Center for Educational Communication (NCEC)

The National Center for Educational Communication of the National Institute of Education, responsible for the development of a national communication system to support state and local linkage centers, college and university libraries, and commercial marketing services.

NCEC is expanding ERIC as the comprehensive, national educational report retrieval system, to serve all levels and subject fields of education and to assist with the implementation of ERIC computer searching systems.

The Center encourages nationwide distribution and use of USOE-supported instructional materials by means of the USOE Copyright Program and Publishers Alert Service and encourages state educational agencies to establish comparable copyright programs.

NCEC provides interpretative summaries that distill and synthesize information about current knowledge and exemplary practices on priority issues and disseminates and facilitates the use of the resulting condensed knowledge through a variety of distribution means.

To increase significantly the rate at which organizations adapt, install, and maintain programs making use of demonstrably effective school-based practices and R&D products, NCEC disseminates nationwide information about effective R&D products and school-based programs, with emphasis on support for USOE priorities; develops comprehensive, information linkage and referral components in all state agencies and among educational development sites to aid educators in finding needed information and to provide retrieval and reference services in support of educational extension agents; maintains a network of educational extension agents to assist local educators in selecting and applying relevant knowledge and tested programs and practices; and facilitates state and locally financed ex-expansion of the extension agent program.

National Center for Educational Statistics (NCES)

The National Center for Educational Statistics of USOE, designor, director, coordinator and executor of all statistical programs for the Office of Education; providor of leadership in Educational Statistics at the federal, national and international level; and developer of an integrated and interlocking system of educational statistics to meet federal, state, local and institutional needs for planning and management. NCES gathers, stores, analyzes and disseminates statistical data and analytical studies to show the condition and progress of American education. NCES relates educational statistics to critical public issues and provides quantitative information for decision and policy-makers at all levels of society. It establishes and implements technical statistical standards for USOE data collection and reporting, and maintains liaison with and provides statistical support for all USOE bureau of staff offices on data acquisition needs and reporting requirements. (See also Office of the Deputy Commissioner for Renewal)

National Center for Educational Technology (NCET)

The National Center for Educational Technology of USOE, the administrator of the Educational Broadcasting Facilities Program, the Technical Training Programs, and the Office of Education support for educational television programming (Sesame Street and The Electric Company). The Center mounts projects in the field of educational technology directed at improving the quality of educational technology at the classroom level. NCET further coordinates all Office of Education educational technology activities and projects and is a central source of knowledge and expertise concerning the total range of USOE-sponsored technology-for-education activities. (See also Office of the Deputy Commissioner for Renewal)

National Center for the Improvement of Educational Systems (NCIES) (See Bureau of Educational Personnel Development) (DCR)

National Competency-Based Education Centers

Centers established to provide developmental assistance and training services for those who are interested in installing competency based education programs.

CBE Center
College of Education
Florida State University
Tallahassee, Florida
904-599-2286

CBE Center
College of Education
University of Houston
Houston, Texas
713-749-3621

CBE Center
College of Education
University of Georgia
Athens, Georgia
404-542-4244

CBE Center
College of Education
University of Toledo
Toledo, Ohio
419-531-5711

CBE Center
College of Education
Syracuse University
Syracuse, New York
315-476-5541

CBE Centers (*Con't*)

CBE Center
College of Education
Teachers College
Columbia University
Columbia, New York
212-870-4160

CBE Center
College of Education
University of Wisconsin
Madison, Wisconsin
608-262-6152

CBE Center
College of Education
Michigan State University
East Lansing, Michigan
517-355-1903

CBE Center
Oregon State System of Higher
Education
Monmouth, Oregon
503-838-1220

National Commission on Performance-Based Education (Frederick McDonald, Director, Educational Testing Service, Princeton, New Jersey)

A national commission of educational leaders concerned with (1) a continual and comprehensive analysis of the national CBE situation, with (2) the major problems of research and development, and with (3) the development of basic materials of instruction and assessment-evaluation.

National Consortium of Competency-Based Education Centers

A consortium of the directors of the Elementary Education Models developed under a grant from the National Center for Educational Research and the National Center for Competency-Based Education, Norman Dodl, Director, Florida State University, Tallahasse, Florida. The group is currently focusing on problems of model development, on development of a "National Model of CBE," on providing consultant services for leadership training, and on developmental assistance. (See National CBE Centers)

National Education Association (NEA)

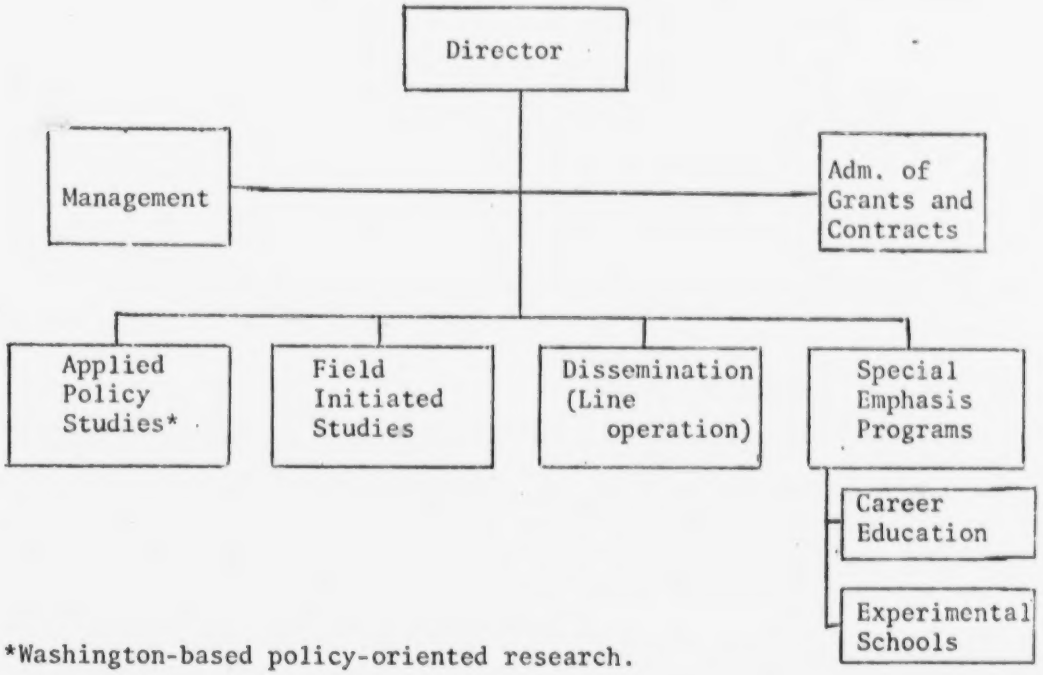
An independent, voluntary, non-governmental organization open to all professional educators, regardless of position, rank, and authority. It is the largest professional association in the world, and the major

overall professional association for educators in the United States. The Association is dedicated to the improvement of American education at all levels and is an active leader in new programs of curriculum, research, and teacher certification. Its major publications are Today's Education (published nine times a year) and the NEA Reporter (published eight times a year).

National Institute of Education (NIE)

The National Institute of Education, a new semi-autonomous agency within the education division of the Department of Health, Education and Welfare responsible for all educational research and development.

Proposed Organization, November, 1972



*Washington-based policy-oriented research.

National Research Centers

Established to meet national needs for research in specific areas of science requiring facilities, equipment, staffing, and operational support which are beyond the capabilities of private or state institutions and which would not appropriately be provided to a single institution to the exclusion of others. Unlike many federally sponsored research laboratories, the National Science Foundation-supported National

Research Centers do not perform specific research tasks assigned by or for the direct benefit of the government. They are established and supported for the purpose of making available, to all qualified scientists, the facilities, equipment, skilled personnel support, and other resources required for the performance of independent research of the scientists' own choosing, in the applicable areas of science. Following are locations and addresses for additional information on the five centers:

Cerro Tololo Inter-American Observatory
Office of National Centers and Facilities Operations
National Science Foundation
Washington, D.C. 20550

Kitt Peak National Observatory
950 Cherry Avenue
Tucson, Arizona 85717

National Astronomy and Ionosphere Center
Box 995
Arecibo, Puerto Rico 00612

National Center for Atmospheric Research
P.O. Box 1470
Boulder, Colorado 80302

National Radio Astronomy Observatory
Charlottesville, Virginia 22901

(See Regional Laboratory, Research and Development Centers)

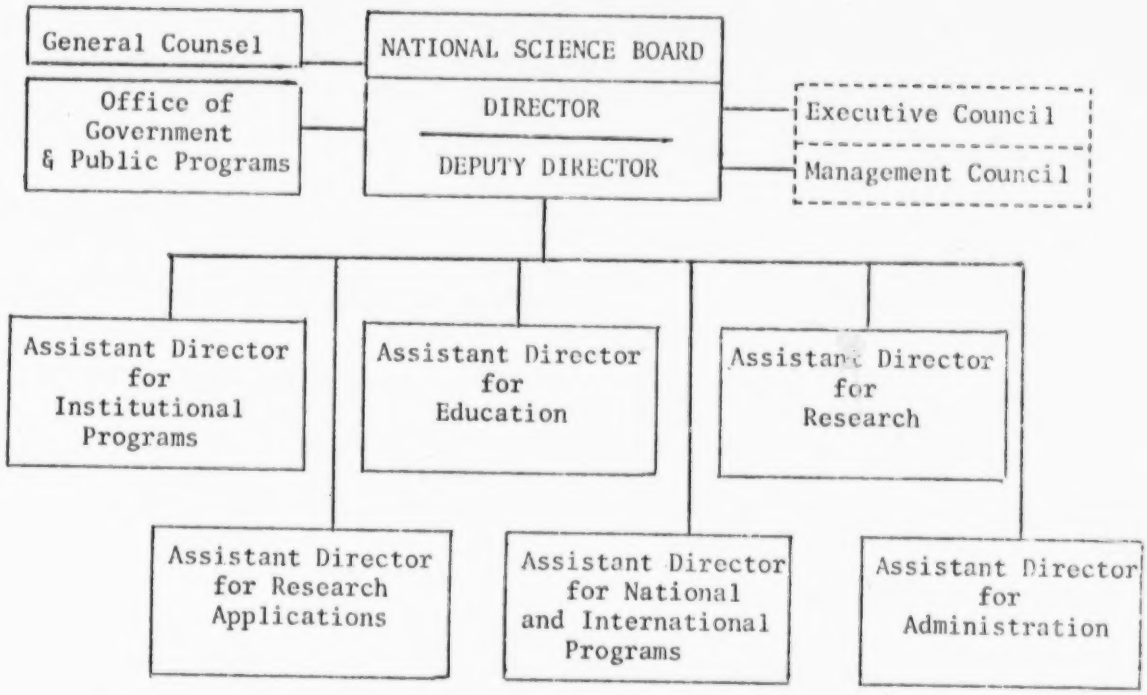
National Science Foundation, (NSF)

The National Science Foundation, an agency of the Federal Government established in 1950 to advance scientific progress in the United States. The Foundation fulfills this responsibility primarily by sponsoring scientific research, encouraging and supporting improvements in science education, and fostering scientific information exchange. NSF does not itself conduct research or carry out education projects.

The Foundation supports scientific research and education projects in the mathematical, physical, medical, biological, social, and engineering sciences--and in interdisciplinary areas comprised of overlapping fields such as oceanography, meteorology, and geochemistry, etc. The Foundation does not support projects in clinical medicine, the arts and humanities, business areas, social work, or education methodology.

ORGANIZATION

NATIONAL SCIENCE FOUNDATION



Needs Assessment

A process--usually a collaborative effort of all the educational constituencies--to examine the gap between specific goals and an existing situation. The evaluative program is essentially one of identifying the felt needs of students, of the community, and of society and assessing the degree to which those needs are being met by the current efforts or accomplishments of the educational system. On the basis of this assessment, the decision-maker is able to select those problems areas which most need attention or modification and to design possible means of satisfying those needs. One example of a Needs Assessment Model is that devised by the Houston Teacher Center:

1. Determine that a needs assessment will be conducted.
2. Identify the assessment leadership, the target area, and the referent groups.
3. Conduct training for the model leadership.
4. Implement the model to assess programmatic needs and establish priorities within those needs.

5. Determine discrepancies between priorities and actual outcomes of present existing efforts.
6. Utilize the data on priorities and discrepancies to identify needed program thrusts.
7. Identify teacher competencies which need strengthening.
8. Relate teacher competency needs with identified program thrusts.
9. Establish teacher training experiences based on the priority needs, program thrusts, and needed teacher competencies.

(See also Accountability Model)

Objectives

Specified outcomes in terms of which programs are carried out and evaluated:

1. *Affective Objectives*: Objectives designed to reinforce or change human attitudes central to behavior in educational activities (values and feelings, appreciations, interests, etc., toward ideas, persons, or events). It is important to note that affective objectives are usually cognitions about effective events.

2. *Behavioral Objectives*:

   a. Statements of educational goals (general or precise) in terms of the observable behavior of the learner as a measure of achievement. Usually, behavioral objectives are expressed in a three-part format: (1) descriptive statement of the goal, (2) the conditions under which the goal is to be reached, and (3) the level of mastery expected.

   b. Objectives designed to reinforce or change specific behaviors in order to improve an individual's contribution to the educational activities in which he is involved. The increased use of such objectives has resulted in considerable controversy. Those who support behavioral objectives maintain that educators generally behave in ways that do not strengthen the educational process and need to "change their ways" if any improvement is to take place in the system; others feel that attempts to influence behavior represents inhuman "control" devices and are contrary to the basic nature of the education process. In addition, some hold that not all objectives can be stated in behavioral terms, e.g., the objectives of an instructional seminar.

3. *Cognitive Objectives*: Educational objectives which specify behaviors of the learner relating to perceiving, understanding, processing, or using of knowledge. These objectives together with affective, performance, and product objectives, form the basis for competency-based educational programming.

4. *Enabling Objectives*: Objectives which describe those knowledges, skills, and attitudes which a learner must attain at some intermediate point if he is to acquire the terminal objective.

5. *Instructional Objectives*: Those purposes and expected outcomes that guide the learning activities.

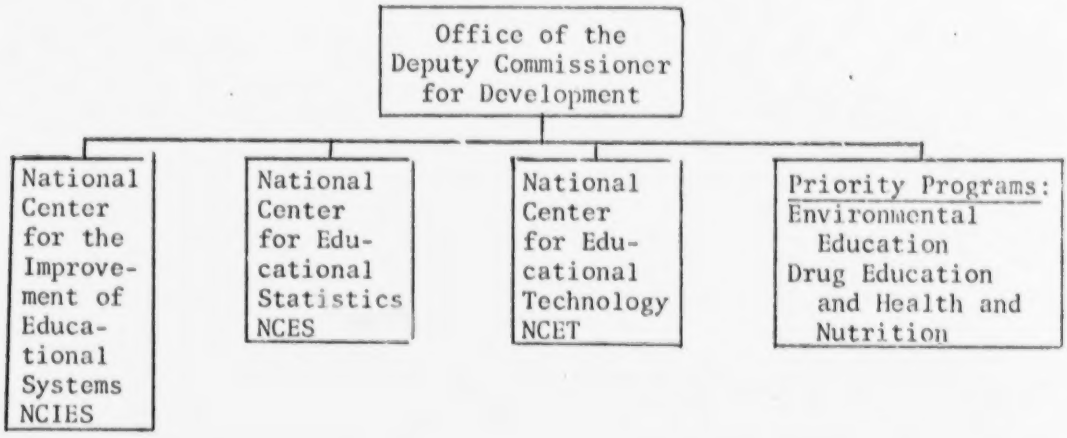
6. *Terminal Behavior Objectives*: Objectives which state what the learner is to be able to do at the end of instruction. They specify the standard levels of performance in behavioral terms.

Office of Management and Budget (OMB)

The Office of Management and Budget, created on July 1, 1970, supplanting and expanding the Bureau of the Budget. It was formed to bring better management and efficiency into the operation of government. Its expanding role is to undertake a comprehensive review of all government programs now in existence to determine whether they are meeting the purpose for which they were designed.

Office of the Deputy Commissioner for Development (DCD)

The unit responsible for administering a significant portion of the discretionary funds available to the United States Office of Education. The Office was recently organized under the Deputy Commissioner for Development and includes three major National Centers and several high priority special programs. The general organization of DCD is as follows:


Office of the Deputy Commissioner for Development
National Center for the Improvement of Educational Systems NCIES
National Center for Educational Statistics NCES
National Center for Educational Technology NCET
Priority Programs:
Environmental Education
Drug Education and Health and Nutrition

(See also United States Office of Education, National Center for Improvement of Educational Systems, National Center for Educational Statistics, National Center for Educational Technology)

Operational Grant

A grant which provides sufficient funding for a program to become fully operational. Such a grant usually follows a planning grant which provides funds for planning and, in some cases, piloting the operational program. Grantees may bypass the planning phase and go directly into an operational program if sufficient evidence is provided to show that extensive planning is either unnecessary or has already been accomplished. (See Continuation Grant, Planning Grant, Qualifying Grant)

Output-Oriented Program

A program which is guided and evaluated by what is to be produced, that is, by "expected outcomes." Program design emphasizes product output, and evaluation is based on "exit criteria." Formal eligibility and entrance credentials are given relatively low priority. This kind of program makes possible a great deal of flexibility regarding participant qualifications and program strategies while still keeping the focus on achievement of objectives. (See also Expected Outcomes, Performance-Based Teacher Education)

Para-Professionals

Those individuals, aides, assistants, etc., working with certificated educational personnel who provide support and follow-up for instructional activities--activities which are usually initiated by the classroom teacher.

Parity

Collaborative, mutual, deliverative decision-making, and planning on the part of those giving and receiving services and shared decision-making with equivalent respect to all input. The relationship of parties to a expertise, perspectives, and needs of each of the parties, is a means of making decisions for the common good. In educational programs, a parity relationship typically involves school, community, and university, as well as other special interests, in policy-making and management.

Performance-Based Teacher Education

A teacher education program where the learning outcomes and the indicators acceptable as evidence of the realization of these outcomes, specified and made public. (This type of program is sometimes used as the basis for certification of new teachers.) Learning outcomes may be evidenced at:

1. The knowledge level (the result of interacting with "protocol" materials).

Personalized Instruction

Instruction which is designed to meet the specific needs of learners. Education is personalized when assessment, objectives, strategies, and evaluation are planned with the learners and tailored to the learner's individual needs, level, rate, values, and choices. Although personalized learning experiences most often occur in individualized or small group situations, they may take place within large groups--as long as the above criteria applies. (See Individualized Instruction)

Pilot Program (See Program Types)

Plan of Operation (PO)

The specific program plan which is developed after a proposal has been evaluated and approved for funding. The PO usually becomes an actual part of the contract or grant and is the primary basis against which progress and accomplishment are measured.

Planned Variation Site Program

Announced by Housing and Urban Development Secretary Romney in July, 1971, this program designed to demonstrate what cities can do about their problems when given more authority to develop their own solutions, more resources to implement those solutions, and less direction from Washington. Twenty city sites were selected for participation in Planned Variations. Variations proposed include the following: city-wide program, major local review and revision, reduction of federal review, and special task forces. Efforts to more effectively pool educational resources within these sites will also occur, but exact plans for how they will be related to the overall plan have yet to be worked out. Funds were allocated for Model Cities to carry out Planned Variations in fiscal year 1972.

Planning Grant

A relatively small amount of money (usually less than $50,000) to be used to (1) plan a "full-scale" or operational program which will also be supported by federal funds or (2) plan a new program that will be supported by the institution developing the plan for which developmental funds were otherwise unavailable. Most planning grant funds are usually spent on bringing a variety of resource personnel together in order to plan with as much input and wisdom as possible. (See Continuation Grant, Operational Grant, Qualifying Grant)

Portal School

Two complementary meanings: first, a facility--a regular public school

2. The skill level (the result of interacting with "training" materials).
3. The output level (the result of interacting with "integrating" materials).
4. The performance level (the behavior of the teacher).
5. The consequence level (the behavior of pupils).

(See Competency-Based Education, Competency-Based Teacher Education)

Performance Criteria

Standard for measuring evidence of achievement. In answering the question, "What is a professional teacher?", it is important to find acceptable evidence of successful performance by a teacher. Examples of such criteria are those set forth by Richard Turner of Indiana University:

> Criterion Level 6 is concerned with the effects of a training program on improvements in teacher knowledges and understanding. Criterion Levels 5 and 4 are concerned with the effects of teacher training on improvement in pedagogic skills under laboratory or simplified training conditions. Criterion Level 3 addresses itself to the effects of training on a teacher's behavior under actual classroom conditions. The concept of pupil change as a criterion of teacher effectiveness is introduced at Criterion Levels 2 and 1. Criterion Level 2 is concerned with changes in pupil behavior that can be effected in a relatively short time period (one to two weeks) under actual classroom conditions. Criterion Level 1 is concerned with the long-range effects of teacher behavior on changes in pupil achievement and well-being.
>
> There are fundamental differences between Criterion Levels 6 through 3 and Criterion Levels 2 and 1. Criterion Levels 6 through 3 focus directly on the impact of training on teacher behavior. Criterion Levels 2 and 1 are concerned with both the effects of training programs on teacher behavior and with the effects of teacher behavior on pupil performance.

Performance Effectivenss Rate Track (PERT Chart)

A PERT chart which diagramatically outlines the tasks to be undertaken in a given project or program, sets an expected rate of accomplishment for those tasks, and tracks the sequence of the task activities. The time span for each task is estimated and then the time total for all tasks is computed in order to predict minimum and maximum completion rates.

Performance Standards

The criteria in behavioral terms by which actions are judged to be effective for ineffective in meeting intended outcomes. (See Performance-Based Teacher Education, Performance Criterion)

special functions and resources, second, a part of an overall strategy to change education systematically.

A portal school strategy is a means to bring together in one or more school buildings the resources of a university, school district, and community to provide a focal point for:

1. introducing new pre- and in-service teacher education programs on site;
2. introducing new curricula, instructional techniques and staffing patterns both to the district and the university;
3. providing a means of diffusing trained and retrained personnel as well as tested practices and products to other schools in the district; and
4. developing a more effective partnership between school and community.

Portal schools require cooperative governance with all components--university, school district, teachers, parents, professional associations--taking part in decision-making.

To date, efforts at developing portal schools are concentrated principally in the Teacher Corps and the Council of the Great City Schools. Examples of different portal school "models" have been developed by Florida State University, Tallahassee, the University of Georgia, Athens, and Temple University, Philadelphia. (See Laboratory School, Producer Center)

Post Secondary Education

Any formal educational experience occuring after graduation from high school, generally including adult education programs and programs at technical institutes, community colleges, junior colleges, and colleges and universities.

Power

1. Controlling influence on the quality of the educational system. The degree of control that certain individuals, groups, or institutions have regarding the making of educational policy. Much of the recent confrontation between educational constituencies has resulted from the belief by the "locked out" constituencies that "power" levels are directly proportional to money control levels.

2. The ability to grant or withhold privileges or reward within educational systems.

Precis

"A proposal for a proposal." A brief outline, usually including some rough budget estimates, of a proposed program used to determine general eligibility and quality of proposed projects prior to need for developing full blown proposals.

Preservice Education

The systematic and formalized program that prepares persons to begin full time educational careers. Program elements usually include the history of education, issues and problems of education, knowledge concepts, pedagogical skill development, educational psychology and sociology, and practice teaching. (See Competency-Based Teacher Education, Performance-Based Teacher Education, Undergraduate Preparation of Educational Personnel)

Process Evaluation (See Evaluation)

Producer Center (Also called Radiation Center)

In Title I and Title III programs of the Office of Education, a physical site, usually a school, that disseminates education practices or processes that have been validated through extensive field testing; and provides technical assistance to consumer Centers and other institutions desiring to install products developed. (See also Consumer Center, Portal School, Teacher Center, Training Complex)

Product Evaluation (See Evaluation)

Program Guidelines

Those "recommendations, rules, regulations and requirements" which are developed by the United States Office of Education and the educational communities it serves to help potential program applicants to prepare proposals for funding and to insure that the programs to which the guidelines apply carry out the intent and mandate of the authorizing legislation. (See also Federal Register)

Program Planning and Budgeting System (PBBS)

A structured procedure for determining policy in the allocation of resources for accomplishment of priority programs. It emphasizes long-range planning, analytic evaluative tools, and economic rationality in the setting of goals and objectives and in the determination of programs. (See Govt Chart, MBO, PERT)

Program Types

1. *Research Program*: systematic study, investigation, or inquiry aimed at the discovery of new facts or knowledge.

2. *Development Program*: a program aimed at applying or translating research results into operational use.

3. *Demonstration Program*: the establishment of a new or revised program or activity for display purposes. Implies that it has been tested and validated and is meant to serve as a model for replication.

4. *Experimental Program*: a program that is being tested, where the results or outcomes are uncertain. Experimental programs are normally carried out in operational settings, but under controlled conditions, involving planned variations, pre- and post-tests and control and experimental groups.

5. *Pilot Program*: a program that is placed into operation on a trial basis to work out any bugs in advance of full installation.

6. *Service Program*: a program of considerable magnitude directed at helping state and local education agencies to overcome major educational problems.

Project Monitor

Each Office of Education project or grant assigned specialist, called a project monitor or project officer, who is responsible for negotiating the details of the project or grant. The monitor must be sure that the project or grant complies with all legal requirements of the law under which it is authorized and is consistent with the program intent of that legislation. The monitor is usually the primary communication link between the project and the USOE program of which it is a part. The monitor is, therefore, responsible for developing and facilitating an effective information flow between the project and the Office of Education.

Proposal

A document submitted to a funding agency outlining a request for financial support for a particular program. The contents of a proposal are usually organized according to specific guidelines issued by the funding agency.

Although there is great variation in requirements on form, proposals usually include a statement of need for the proposed program, an outline of program goals, a specific plan for achieving those goals, an outline of the resources that will be used to carry out the plan, and a budget showing what it will cost to do the job. (See Program Guidelines)

Protocol Materials

Reproductions (visual, auditory, or printed) of behavior that portray concepts in teaching and learning. The immediate purpose of protocol production is to provide the raw material or data for interpretation of classroom behaviors. The ultimate purpose is to facilitate the development of interpretative competencies in teachers. Such competencies include:

1. The ability to demonstrate a functional knowledge of some psychological, philosophical, and sociological concepts that are relevant to the teacher's work.
2. The ability to interpret behavior situations in terms of significant educational concepts.
3. The ability to use interpretations to formulate alternative plans for teaching and other activities such as conferences with parents and interaction with administrators.

(See also Integrating Materials, Training Materials)

Proven Products and Processes (See Validated Products and Processes, Dissemination Review Panel)

Pupil Gain Measures

Used more and more as ultimate criteria of effectiveness of any process or program of teacher education.

Radiation Center (See Producer Center)

Readers

Constituents from the field who help program directors to evaluate project proposals. Readers are generally drawn from a broad cross-section of educators, and whenever possible are selected for their direct expertise and experience in the particular program area of a given proposal or set of proposals.

Regional Laboratory

Supported by the National Institute of Education, as independent, autonomous organizations established as a result of an amendment of the Cooperative Research Act in 1965. They are heavily oriented toward final development and adaptation of materials or techniques for direct use in the schools. Laboratories and research and development centers (see Glossary) coordinate their efforts, often dividing responsibilities according to staff competencies in order to reach mutual goals. Following are locations and addresses of the eleven regional laboratories currently in operation:

Applachia Educational Laboratory
1031 Quarrier Street
P.O. Box 1348
Charleston, West Virginia 25325
309-344-8371

Central Midwestern Regional Educational Laboratory
10646 St. Charles Rock Road
St. Ann, Missouri 63074
314-428-3535

Center for Urban Education
105 Madison Avenue
New York, New York 10016
212-889-7277

Far West Laboratory for Educational Research and Development
Claremont Hotel
1 Garden Circle
Berkeley, California 94705
415-841-6950

Mid-Continent Regional Educational Laboratory
104 E. Independence Avenue
Kansas City, Missouri 64106
816-221-8686

Northwest Regional Educational Laboratory
400 Lindsay Building
710 S.W. 2nd Avenue
Portland, Oregon 97204
503-224-3650

National Laboratory in Higher Education
Mutual Plaza
Chapel Hill and Duke Streets
Durham, North Carolina 27707
919-688-8057

Research for Better Schools
1700 Market Street
Suite 1700
Philadelphia, Pennsylvania 19103
125-561-4100

Southwestern Cooperative Educational Laboratory
117 Richmond Drive, N.E.
Albuquerque, New Mexico 87106
505-265-9561

Southwest Regional Laboratory
11300 LaCienega Boulevard
Englewood, California 90304
213-776-3800

Regional Laboratories (*Con't*):

Southwest Educational Development Laboratory
800 Brazos Street
Austin, Texas 78767
512-476-6861

(See National Research Centers, Research and Development Centers)

Regulations, Congressional (See Federal Register, Program Guidelines)

Regulatory Agency/Authority

An appropriate agency authorized to set and oversee standards of performance for persons and programs for which it is responsible. The official authority to regulate, judge, or evaluate performance of programs and persons for which an agency is responsible in terms of effective behaviors. (See also Competency-Based Teacher Education, Performance Criteria, Teacher Performance)

Replicability

The ability to be repeated. The characteristic of an educational product or process that allows it to be applied to a wide range of learning environments, without changing the position results. (See Delivery System, Transferability Model)

Reports on National Education Reform (See Appendix C)

Request for Proposals (RFP)

An annoucement to the field which briefly outlines the needs and objectives of a particular program along with procedures for application and submission of proposals from those interested in participating in the program. REP's range from those of heavily funded programs which bring in a large number of proposals to those requests which relate to very narrow and specific needs and which are usually therefore directed at only several highly specialized persons or institutions.

Research and Development Center (R&D Center)

Supported by the National Institute of Education, the basic objective of the eight university-based Research and Development Centers, creates improved educational programs and practices through systematic long-term programs of research and development. Each center brings together resources and inter-disciplinary talent to focus on significant educational problem.

Center for the Advanced Study of Educational Administration
147B Hendricks Hall
University of Oregon
Eugene, Oregon 97403
503-686-5171

Center for Social Organization of Schools
Johns Hopkins University
3503 North Charles Street
Baltimore, Maryland 21218
310-366-3582

Center for the Study of Evaluation
University of California, Los Angeles
145 Moore Hall
405 Hilgard Avenue
Los Angeles, California 90024
213-825-4711

Center for Research and Development in Higher Education
University of California, Berkeley
1947 Center Street
Berkeley, California 97420
415-642-5040

Pittsburgh Learning R&D Center
University of Pittsburgh
160 North Craig Street
Pittsburgh, Pennsylvania 15213
412-621-3500

Research and Development Center for Teacher Education
University of Texas
Education Annex 3.101
Austin, Texas 78712
512-471-1343

Stanford Center for Research and Development in Teaching
Stanford University
770 Welch Road
Palo Alto, California 94304
415-321-2300 X-4717

Wisconsin Research and Development Center for Cognitive Learning
University of Wisconsin
1404 Regent Street
Madison, Wisconsin 53706
608-262-4901

The R&D Centers are at institutions selected for their staff strengths and commitment to problem-oriented research and initial development. Centers and the Regional Laboratories (see reference) coordinate their efforts, often dividing responsibilities according to staff competencies, in order to reach mutual goals. Comprehensive research facilities are being acquired or constructed, and equipped, to accommodate high quality research and development at educational laboratories and R&D Centers.

Research Program (See Program Types)

Resource Assessment

1. An assessment of the total range of resources available to a particular area for meeting a specific, usually high priority, educational need.
2. The process by which the variables of instructional support are diagnosed, interpreted, and prescribed to meet specific learning objectives.

Revenue Sharing

The "turning back" of a portion of federal taxes to local governmental agencies, usually states, in order to (1) provide necessary funds for high priority needs which cannot be met entirely with local taxes, and (2) more closely relate federal funding programs to local needs. (See also Services Integration)

Right To Read Program

With the motto "that all mmay read," Office of Education which is a coordinated endeavor involving all segments of society, public and private, professional and nonprofessional, to insure that in the next decade no American shall be denied a full and productive life because of an inability to read effectively. The major goal of the Right To Read effort is to increase functional literacy.

School-Community Liaison Teacher

A teacher who maintains formal and regular contact with community groups involved in education. The teacher interprets school programs for the community and provides school personnel with continual feedback from the community on school programs.

School Without Walls

One of a variety of expressions which is used to designate the "open school" concept. It denotes a school in which learning takes place in a variety of settings, usually quite different from both the traditional "square" school classroom, and the general physical characteristics of a building. (See also University Without Walls)

Scope of Work

The proposed activities that will be undertaken by a given project to enable it to meet its stated objectives.

Sensitivity Training

A process for developing an individual's personality and leadership potential by making him more aware of himself, the people around him and the nature of his interaction with others. This concentrates on the removal of ego defenses which often hinder effective communication or involvement with others.

Service Program (See Program Types)

Services Integration

A direction in federal programming in which the great variety of federal services provided in any given community are more effectively coordinated and/or integrated in order to maximize their mutual support and potential impact. (See also Renewal Sharing, Site Concentration, Site Configuration, TREND Site)

Site Concentration

The bringing together of all or as many as possible of the BEPD/NCIES project types into one city or university in order to provide maximum program coverage, and to increase the "critical mass" of federal program support within a particular location. Major site concentration "models" have been developed in the Louisville School System and Indiana University. (See Critical Mass, Site Configuration)

Site Configuration

Interrelation of the various programs sponsored by the BEPD/NCIES in one particular location, in order to (1) more effectively utilize their resources and achieve economy in management, (2) tailor their missions to more closely relate to unique, local needs, and (3) increase their critical mass and potential impact. (See Site Concentration)

Soft Money

Funds obtained from outside the "regular" budget of an institution--usually from federal, state and private foundation sources. These funds are generally used for short term (1-5 years) experimental research or training programs.

Software

Instructional systems and processes, curriculums, written or printed educational materials, guides, books, tests, worksheets. They may stand alone as learning packages or units or they may be accompanied by media or other hardware. (See also Hardware)

Southern Consortium (Norman Johnson, Director, North Carolina State College at Durham, Durham, North Carolina)

A consortium of "small" institutions which is concerned with the development of local models of competency based teacher education and on a dissemination program for "small" colleges interested in CBE programs.

Special Education (See Exceptional Children)

State Education Agency (SEA)

The organization established by law for the primary purpose of carrying out at least a part of the educational responsibilities of the state. They are characterized by statewide jurisdiction and are generally composed of a state board or commission, chief executive officer, and staff.

Strategy

A deliberate plan of action characterized by rational planning, for achieving an objective or set of objectives.

Summative Evaluation (See Evaluation)

Taxonomy

A hierarchically ordered classification system. Such conceptual schemes are useful for arranging and selecting priorities, for specifying objectives, and for evaluating programs and practices. Familiar to educators is the Taxonomy of Educational Objectives by Bloom, Krathwohl, and others.

Teacher Center

1. A place where teachers share teaching experiences, have access to a wide range of instructional resources, and are trained in specific instructional competencies.

2. One of a large group of centers which represent overall a great variety of purposes. Each individual center, however, has a specific emphasis contributing to the improvement of inservice teachers, e.g., performance-based programs, training of teaching interns, coordination for area educational cooperative, etc.

3. In the proposed Educational Renewal Program, the management mechanism for carrying out the Comprehensive Educational Plan. (See Hand-On Resource Center, Training Complex)

Teacher Corps

Authorized in 1966, the Corps' objectives: (1) to strenghten the educational opportunities available to children in areas having concentrations of low-income families, and (2) to encourage colleges and universities to broaden their programs of teacher preparation. The program assists colleges and universities, through project grants, to develop and adopt programs of self-paced, competency-based teacher education. It assists school systems to develop and adopt processes for the introduction of new curricula, teaching methods, staffing patterns, and out-reach to the community and to train and retrain personnel for these processes and innovations. It assists colleges and school systems to develop community-based, volunteer-assisted programs of education such as youth-tutoring-youth and training of parents to offer educational help to their children.

Teacher Corps Associates Program

A program established to train educational leaders from poverty areas in the concepts of Competency-Based Teacher Education, especially as they relate to the affective domain and pluralistic education.

Teacher Education Model

An integrated set of program design specifications that establish boundaries or parameters for the structure, function, content, and operation of a teacher education program. A model is not an operational program; it simply provides a framework within which operational programs can be created. Fact, theory, and accumulated wisdom dictate the substance or content of model-based programs and because different people have access to, or accept different sets of facts, theories, and accumulated stores of wisdom, model-based programs vary in their substance. All model-based programs, nevertheless, share the basic parameters established by the model on which they rest. (See also Elementary Model)

Teacher Performance

All the things which a teacher does in the classroom to produce intended changes in learner behavior. The more important aspects of teacher performance include:

1. teacher's ability to control his own behavior;
2. the effect of teaching behavior on pupil attitudes and feeling; and
3. the effect of teaching behavior on what youngsters learn cognitively and how they learn it.

(See Competency-Based Teacher Education, Competency-Based Education)

Teacher Training in Developing Institutions Program (TTDI)

A program administered by the National Center for the Improvement of Educational Systems directed at (1) the strengthening of teacher training in small colleges--especially those institutions with predominantly black enrollments which train over half the nation's black teachers; and (2) the training of teachers displaced by desegregation programs.

Technical Assistance

Resources or consultant services obtained or available to an educational group or institution to help with a specific problem. (See Developmental Assistance)

Terminal Behavior Objectives (See Objectives)

Training Complex

A social institution invented to serve teacher education by providing "neutral ground" on which all institutions and agencies that have an investment in teacher education, especially the colleges, the schools, and state certification agencies, can direct their collective resources toward improving.

As described in Teachers for the Real World, the training complex is a social invention or institution to facilitate cooperation between colleges and universities and the schools in improving the preservice and inservice training of teachers and other school personnel. Further, it provides a convenient and efficient means for engaging in this enterprise the full range of training resources of business, industry, and community. (See Teacher Center)

Training Materials

"Packaged" and thereby sharable or distributable learning experiences that have a known degree of reliability in getting a learner to execute a particular skill or set of related skills at a stated performance level. The demonstration context may be simulated (for example, a micro-teaching situation), or it may be a real-life situation. In either case, practice and corrective feedback, two essential elements in skill training, must be provided.

Those aspects of training materials that deal with the practice and corrective feedback will assume the form of instructions and suggestions rather than substantive materials with which to interact. (See also Integrating Materials, Modules, Protocol Materials)

Training Modules (See Module)

Training Teacher Trainers (TTT)

Administered under NCIES (Formerly BEPD), the Triple-T Program, a process for engaging the full resources of universities, schools and communities in creating new cooperative institutional arrangements for preparing educational personnel, particularly key agents of change, persons who teach or lead, as well as teacher trainers and trainers of teacher trainers. New settings for persons concerned with teacher training are provided with particular attention to the nature of the students and the structure of the community. In many of these settings cultural pluralism is an important reality which the teacher must take into account. Much of the training in TTT is done in school and community settings and includes inter-disciplinary preparation.

Transferability Model

A model which is not embedded in the uniqueness of its site of origin, and which is a design for educational activities which quarantees replicability of a specified set of activities to any education site which meets minimum criteria.

TREND Site (Targeting Resources for the Educational Needs of the Disadvantaged)

One of a number of alternative program models developed by the Office of Education directed at improving education for children from low income families. TREND Sites attempt to coordinate in LEA's all federal programs giving high priority to serving the poor and is one of about ten plans for urban education improvement in the nation where a serious attempt is being made to more effectively concentrate and relate federal support programs for the improvement of the quality of education.

Undergraduate Preparation of Educational Personnel (UPEP)

The purpose of the UPEP pilot program, to effect significant improvements in the undergraduate education of elementary and secondary school personnel. In order to achieve this objective, the program will seek to stimulate basic reforms in institutions of higher education so that increased resources are devoted to fostering the kinds of undergraduate experiences which will help improve the effectivenss of teachers. (See also Preservice Education)

United Federation of Teachers (UFT)

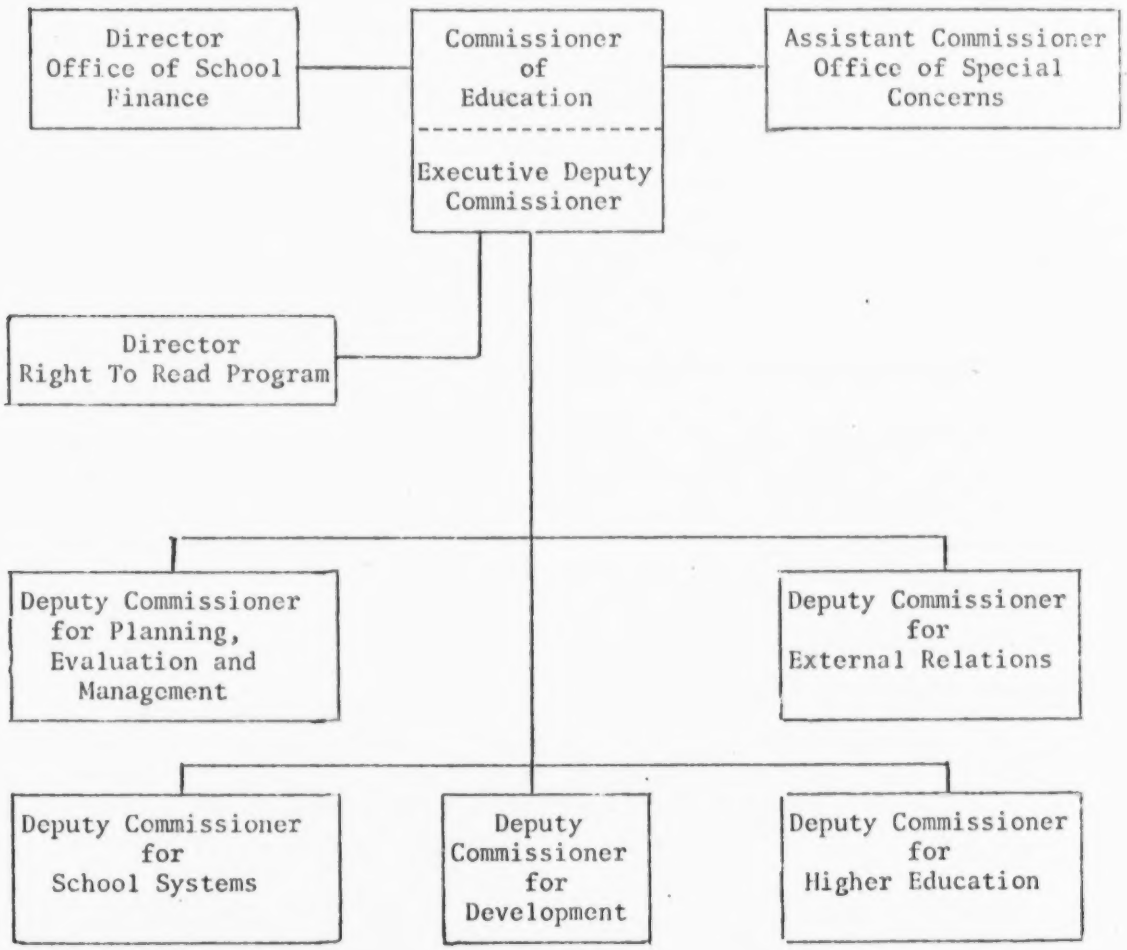
The New York City affiliate of the American Federation of Teachers, AFL-CIO and the National Education Association. It began in 1960 when it was chosen the bargaining agent for all New York City public school teachers. The UFT is a pioneer in teacher collective bargaining in

the public school sector. In 1972, it was instrumental in carrying out a merger of all New York teachers resulting in the New York State United Teachers, affiliated with both AFT and NEA. (See also American Federation of Teachers, National Education Association)

United States Office of Education (USOE)

The United States Office of Education, under the leadership of John Ottina, Acting Commissioner of Education, who is directly responsible to the Assistant Secretary for Education of the Department of Health, Education and Welfare, with its primary mission the administration of education programs authorized by federal legislation and generally providing national leadership in the maintenance, promotion, and pursuit of the best possible educational achievement for all American citizens. The Office of Education oversees approximately 100 programs, costing about six billion dollars annually. (See Federal Missions, Specific Bureaus and Units)

The following organizational chart shows USOE's major units and bureaus:



United States Office of Education Advisory Committees[1]

ACCREDITATION AND INSTITUTIONAL ELIGIBILITY, Advisory Committee on
ADULT EDUCATION, National Advisory Council on
DEVELOPING INSTITUTIONS, Advisory Council on
EDUCATION OF BILINGUAL CHILDREN, Advisory Committee on the
EDUCATION OF THE DEAF, Advisory Committee on
EDUCATION OF DISADVANTAGED CHILDREN, National Advisory Council on the
EDUCATION PROFESSIONS DEVELOPMENT, National Advisory Council on
EDUCATION OF SPANISH AND AMERICAN AMERICANS, Advisory Committee on
EDUCATION AND TRAINING FOR MINORITY BUSINESS ENTERPRISE, Task Force on
EDUCATIONAL RESEARCH AND DEVELOPMENT, Advisory Council on[2]
ENVIRONMENTAL EDUCATION, Advisory Council on
EQUALITY OF EDUCATIONAL OPPORTUNITY, National Advisory Council on[3]
ETHNIC HERITAGE STUDIES, National Advisory Council on[3]
EXCHANGE OF TEACHERS, National Advisory Commmittee for the
EXTENSION AND CONTINUING EDUCATION, National Advisory Council on
FINANCIAL AID TO STUDENTS, Advisory Council on
GRADUATE EDUCATION, Advisory Council on
HANDICAPPED CHILDREN, National Advisory Committee on
INDIAN EDUCATION, National Advisory Council on[3]
LIBRARY RESEARCH, TRAINING, AND RESOURCES, Advisory Council on
QUALITY IN EDUCATION, Advisory Council on[2]
SUPPLEMENTAL CENTERS AND SERVICES, National Advisory Council on
VOCATIONAL EDUCATION, National Advisory Council on

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[1]According to Annual Report of the U.S. Commissioner of Education, Fiscal Year 1972. Further information about the committees, including mission of current membership, can be found in the Annual Report.

[2]Committee not Staffed

[3]Appointment of Membership Currently Pending

United States Office of Education Regional Offices

The ten Office of Education Regional Offices which serve as an important link between national programs and local areas, provide range of information and developmental assistance services as well as directly administer a number of major programs.

I	J.F.K. Federal Office Building Government Office Boston, Massachusetts 02203 617-223-6831	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
II	26 Federal Plaza New York, New York 10027 212-264-4600	New Jersey, New York, Puerto Rico, Virgin Islands
III	401 N. Broad Street Philadelphia, Pennsylvania 19108	Maryland, Virginia, Delaware, West Virginia, D.C., Pennsylvania
IV	Room 404 50 7th Street, N.E. Atlanta, Georgia 30323 404-526-5817	Alabama, South Carolina, Florida, Georgia, Mississippi, Tennessee, Kentucky, North Carolina
V	Room 712, New P.O. Building 433 W. VanBuren Street Chicago, Illinois 60607 312-353-5160	Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota
VI	1114 Commerce Street Dallas, Texas 75202 214-749-3396	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
VII	601 East 12th Street Kansas City, Missouri 64106 816-374-3436	Iowa, Kansas, Nebraska, Missouri
VIII	Federal Office Building 19th & Stout Streets Denver, Colorado 80202 303-297-3373	Colorado, Montana, Utah, Wyoming, North Dakota, South Dakota
IX	Federal Office Building 50 Fulton Street San Francisco, California 94102 415-556-6776	Arizona, California, Nevada, Guam, American Samoa
X	Arcade Plaza Building 1319 Second Avenue Seattle, Washington 98101 206-583-4304	Alaska, Idaho, Oregon, Washington

University Without Walls

The University Without Walls, administered from Antioch College in Yellow Springs, Ohio, an alternative program of higher education sponsored by the Union of Experimenting Colleges and Universities, an association of twenty-five institutions of higher education that have joined to encourage research and experimentation in higher education.

It seeks to build highly individualized and flexible programs of learning. It encourages the student to learn on his own, but provides close and continuing contact between the student and teacher. It redefines the role of the teacher as a facilitator and co-participant in the planning and design of the student's learning experience, and it seeks, through its inclusion of a new mix of age range (16 to 20 and older) to build a new dialogue and trust between younger and older persons. Many additional institutions will probably become involved in the program in the near future. (See also Schools Without Walls)

USOE (See United States Office of Education)

Validated Products and Processes

Those products and processes that have passed through final development and implementation phases and that have been evaluated positively in terms of attainment of intended outcomes. Such products and processes generally have a known degree of reliability and are transferable. (See Delivery System, Dissemination Review Panel)

Voucher (See Educational Voucher)

APPENDIX A:
Some Widely Used Acronyms

AACTE: American Association of Colleges for Teacher Education

AASA: American Association of School Administrators

ADM: Office of Administration

AFT: American Federation of Teachers

ASCD: Association for Supervision and Curriculum Development

ATE: Association of Teacher Educators

BAVTE: Bureau of Adult, Vocational, and Technical Education

BEH: Bureau of Education of the Handicapped

BEPD: Bureau of Educational Personnel Development

BESE: Bureau of Elementary and Secondary Education

BHE: Bureau of Higher Education

BLET: Bureau of Libraries and Educational Technology

CBTE: Competency-Based Teacher Education

CNPPTE: Committee on National Program Priorities in Teacher Education

COP: Career Opportunities Program

DCER: Deputy Commissioner for External Relations

DCHE: Deputy Commissioner for Higher Education

DCM: Deputy Commissioner for Management

DCD: Deputy Commissioner for Development

DCSS: Deputy Commissioner for School Systems

EE: Environmental Education

EEO: Equal Education Opportunities

EPDA: Education Professions Development Act

ERIC: Educational Resources Information Center

ESEA: Elementary-Secondary Education Act

ESAP: Emergency School Assistance Program

FICE: Federal Interagency Committee on Education

GRIP: Grass Roots Improvement Program

HUD: Housing and Urban Development

IHE: Institute of Higher Education

IIS: Institute of International Studies

IOC: Internal Office of the Commissioner

LEA: Local Education Agency

LERC: Local Education Resource Center

LTI: Leadership Training Institute

MBO: Management by Objective

NAEP: National Assessment of Educational Progress

NCEC: National Center for Educational Communication

NCERD: National Center for Educational Research and Development

NCES: National Center for Educational Statistics

NCET: National Center for Educational Technology

NCIES: National Center for the Improvement of Educational Systems

NEA: National Education Association

NERC: National Education Resource Center

NFE: National Foundation for Post-Secondary Education

NIE: National Institute of Education

NSF: National Science Foundation

OCS: Operations Coordination Staff

ODC: Office of the Deputy Commissioner

OE: Office of Education

OEO: Office of Economic Opportunity

OFSR: Office of Federal and State Relations

OL: Office of Legislation

OMB: Office of Management and Budget

OPA: Office of Public Affairs

OPPE: Office of Program Planning and Evaluation

OROC: Office of Regional Office Coordination

OROC: Office of Regional Office Coordination

OSC: Office of Special Concerns

PBTE: Performance-Based Teacher Education

PERT: Performance Effectiveness Rate Track

R&D: Research and Development

SEA: State Education Agency

TREND: Targeting Resources for the Educational Needs of the Disadvantaged

TTDI: Teaching Training in Developing Institutions Programs

TTT: Training of Teacher Trainers

UFT: United Federation of Teachers

UPEP: Undergraduate Preparation of Educational Personnel

USOE: United States Office of Education

APPENDIX B:
Key Publications of Key Agencies

I. OFFICE OF EDUCATION
Office of Public Affairs
Room 4100, FOB 6
400 Maryland Avenue, S.W.
Washington, D.C.
202-963-3733

Publications:

*Catalogue of Federal Education Assistance Programs.
GPO 8E5.211:11035 1972 ($3.25)

*Annual Reports to the U.S. Commissioner of Education,
FY 1971 GOP HE 5.211:11032-72 ($1.25)

*Catalogue, U.S. Department of Health, Education and Welfare
Publications, January 1973

*Education Directory--Education Associations 1971-72
OE 72-71

*American Education

II. NATIONAL SCIENCE FOUNDATION
Office of Public Affairs
1800 G. Street, N.W.
Washington, D.C. 20550
202-632-7443

Publications:

Publications of the National Science Foundation. (NSF 72-6)
(An annual publication listing periodicals, program annoucements, descriptive brochures, annual reports, etc. published by NSF)

*National Science Foundation Grants and Awards (FY 1971)
GPO #NSF 72-2 ($2.50)

*Twenty-First Annual National Science Foundation Report
(FY 1971) GPO #NSF 72-1 ($1.50)

*Mosaic. The official quarterly magazine pubished by NSF.
($2.50 annual subscription; $.70 single copy)

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*Items should be ordered directly from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (Check for publications should accompany your request.)

**Schedule of National Science Foundations Programs for Education in the Sciences.

**Science Education Announcements.

**Guide to Programs, Fiscal Year 1972 (NSF 71-22)
An annual guide to provide summary information about support programs of the National Science Foundation. Describes principal characteristics and basic purpose of each program as well as eligibility requirements, closing dates and addresses for more detailed information, brochures, or where application forms may be obtained.

III. NATIONAL ENDOWMENT FOR THE ARTS
Office of Program Information
806 15th Street, N.W.
Washington, D.C. 20506
202-382-5542

Publications:

*National Endowment for the Arts, National Council on the Arts, Our Programs. GPO #3600-0011 ($1.00)

*New Dimensions for the Arts. A two-year report of the National Endowment for the Arts. (Will be available beginning January 1973)

IV. NATIONAL ENDOWMENT FOR THE HUMANITIES
Education Division
806 15th Street, N.W.
Washington, D.C. 20506
202-382-5891

A monthly newsletter, program announcements, planning and development guidelines, information on grants, and other general materials are available to individuals who request to be placed on the Endowment's mailing list.

V. NATIONAL INSTITUTE OF HEALTH
Assistant Director
Training, Education and Development
Office of Personnel Management
Building 1, Room 19
Bethesda, Maryland 20014
301-496-6224

**Single copies can be obtained by writing to: Distribution Section, National Science Foundation, Washington, D.C. 20550

Publications:

The National Institutes of Health (NIH 72-2)

National Institutes of Health, 1971 Annual Report (NIH 72-3)

VI. OFFICE OF ECONOMIC OPPORTUNITY

Office of Public Affairs
1200 19th Street, N.W.
Washington, D.C. 20506

VII. OTHER PUBLICATIONS

Congressional Directory
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20003

Congressional Pictorial Directory
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Congressional Quarterly, Inc.
Congressional Quarterly, Inc.
1735 K Street, N.W.
Washington, D.C. 20006

Congressional Record
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Congressional Staff Directory
Congressional Staff Directory
300 New Jersey Avenue, S.E.
Washington, D.C. 20003

Department of Health, Education and Welfare (Telephone Directory)
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
202-963-1110

Directory Pamphlet
House Committee on Education and Labor
(Members and Staff)
Rayburn House Office Building
Room 2181
Washington, D.C. 20515
202-225-4527

Education Daily
Capitol Publications, Inc.
Suite G12
2430 Pennsylvania Avenue, N.W.
Washington, D.C. 20037

Education News, October 1971 (A compilation of federal education laws)
House Committee on Education and Labor
Rayburn House Office Building
Room 2181
Washington, D.C. 20515

Organization Chart (U.S. Office of Education)
U.S. Office of Education
202-962-7223

APPENDIX C:
A Selected Bibliography of Publications
on National Educational Reform

A Decade of Thought on Teacher Education, The Charles W. Hunt Lectures, A collection of ten speeches presented at annual meetings of the AACTE from 1960-1969.

An Annotated Bibliography on Selected Documents Related to the Educational Renewal Concept. Washington, D.C.: ERIC Clearinghouse on Teacher Education, February 24, 1972.

Anderson, Wilton. Recruitment of Personnel for Career Opportunity Programs: Its Relevance to Quality Education. Washington, D.C.: National Center for the Improvement of Educational Systems, 1971.

---, and others. "Overview of the Auxiliary Educational Career Programs," New Careers in the American School. New York: Bank Street College of Education, 1972.

Arrowsmith, William. "The Idea of a New University," The Center Magazine, March 1970.

Astin, Alexander W. Some New Directions for Higher Education: A Research Perspective, ACE Research Reports. Washington, D.C.: American Council on Education, Office of Research, 1968.

Averch, Harvey A., and others. How Effective is Schooling? A Critical Review and Synthesis of Research Findings. Prepared for President's Commission on School Finance. Santa Monica, Calif.: The Rand Corporation, 1972.

Axelrod, Joseph. "An Experimental College Model," Educational Record, 48; Fall 1967.

Berg, Ivar E. Education and Jobs: The Great Training Robbery. New York: Praeger Publishers, 1970.

Bigelow, Donald N., ed. The Liberal Arts and Teacher Education--A Confrontation. Lincoln: University of Nebraska Press, 1971.

Birenbaum, William M. A Time for Reconstruction: A Specific Proposal for A New Kind of College for Our New Urban Society . . . and for an Institute for Universal Advanced Education To Coordinate and Consolidate Secondary and Higher Education in the City of New York. Inaugural Address at Staten Island Community College, New York, September 30, 1969.

Borton, Terry. Reach, Touch, Teach. New York: Dell, 1968.

Bowen, Frank. Necessary Next Steps. Washington, D.C.: American Council on Education, 1970.

Cannon, William B. New Federal Rationale and Programs in Higher Education. Chicago: University of Chicago, 1970.

Carnegie Commission on Higher Education. (Clark Kerr, Chairman). Berkeley, Calif.

A Change To Learn: An Action Agenda for Equal Opportunity in Higher Education. New York: McGraw-Hill, March 1970.

Austin, Alexander W., and Calvin B. T. Lee. The Invisible Colleges [1971].

Dissent and Disruption: Proposals for Consideration by the Campus.

Handlin, Oscar. The American College and American Culture.

Heckman, Dale M., and Warren Bryan Martin. Inventory of Current Research on Higher Education, 1968. New York: McGraw-Hill, December 1968.

Hodgkinson, Harold L. Institutions in Transition.

Ladd, Dwight. Change in Educational Policy: Self Studies in Colleges and Universities.

Lee, Eugene C., and Frank M. Bowen. The Multicampus University: A Study of Academic Governance [1971].

Less Time, More Options: Education Beyond the High School.

Mayhew, Lewis B. Graduate and Professional Education, 1980: A Survey of Institutional Plans.

New Students and New Places: Policies for the Future Growth and Development of American Higher Education [1971].

O'Neill, June. Resource Use in Higher Education: Trends in Output and Inputs, 1930 to 1967.

Reform on Campus: Changing Students, Changing Academic Programs, 1971.

Spurr, Stephen H. Academic Degree Structures: Innovative Approaches.

The Fourth Revolution: Instructional Technology in Higher Education--A Report and Recommendations. New York: McGraw-Hill, 1972.

The More Effective Use of Resources--An Imperative for Higher Education: A Report and Recommendations [1972].

The Open-Door Colleges: Policies for Community Colleges.

Wolfle, Dael. The Home of Science: The Role of the University [1972].

Cohen, Audrey C. Human Service Institutes: An Alternative for Professional Higher Education. New York: College for Human Services, March 1970.

Cohen, Audrey C. New Tests To Measure Job Skills and Determine Effective Performance. New York: College for Human Services, 1970.

Cole, Robert. Children of Crisis: A Study of Courage and Fear. New York: Dell, 1964.

Coleman, James S. Equality of Educational Opportunity. Washington, D.C.: U.S. Office of Education, 1966.

Conant, James. The Education of American Teachers. New York: McGraw-Hill, 1963.

Cook, Paul W., Jr. Modernizing School Governance for Educational Equality and Diversity. Amherst: University of Massachusetts Press, 1972.

Cremin, Lawrence. The Transformation of the School. New York: Knopf, 1962.

Danforth Foundation, Ford Foundation. The School and the Democratic Environment. New York: Columbia University Press, 1970.

Dennison, George. The Lives of Children: The Story of the First Street School. New York: Random House, 1969.

Do Teachers Make a Difference, A Report on Recent Research on Pupil Achievement. Washington, D.C.: Office of Education, National Center for Improvement of Educational Systems, 1970. Available from U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402; order number HE5.258:58042.

Edelfelt, Roy, and others. Teacher Designed Reform in Teacher Education Through Teacher Association Negotiations. Washington, D.C.: Office of Education, National Center for Educational Research and Development, August 1972. 30pp.

Education in the Seventies. Planning Paper 68-1. Washington, D.C.: Department of Health, Education and Welfare, Office of Education, Office of Program Planning and Evaluation, 1970.

Elam, Stanley. Performance-Based Teacher Education--What Is the State of the Art? Washington, D.C.: The American Association of Colleges for Teacher Education, January 1972.

Ellul, Jacques. The Technological Society. New York: Knopf, 1964.

Eurich, Alvin C. Campus 1980, The Shape of the Future in Higher Education. New York: Academy for Educational Development, 1969.

---. Reforming American Education. New York: Harper & Row, 1970.

Feldman, Marvin J. Making Education Relevant. Prepared for Governor's Conference on Education. New Brunswick, N.J.: Rutgers University, April 2, 1966.

Field Task Forces on Improvement and Reform in American Education. Washington, D.C.: Task Force '72, 1972. 14pp.

Final Report, Ad Hoc National Advisory Committee on Training Complexes, July 1, 1970. Worcester, Mass.: Clark University, Training Complex Project Administrative Center.

Final Report: Inventory of Training Centers Ad Hoc National Advisory Committee on Training Complexes, June 1970. Worcester, Mass.: Clark University, Training Complex Project Administrative Center.

Foster, Marcus A. Making Schools Work--Strategies for Changing Education. Philadelphia: The Westminister Press, 1971.

Frinks, Marshall L. Planning and Effecting Improvements in the Preparation and Certification of Educators. Denver, Colo.: Improvement in State Leadership Project, July 1971.

Froomkin, Joseph. Aspirations, Enrollments, and Resources: The Challenge to Higher Education in the Seventies. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, 1970.

Gardner, John. Self-Renewal. New York: Harper & Row, 1964.

---. No Easy Victories. New York: Harper & Row, 1968.

---. The Recovery of Confidence. New York: Norton, W. W. & Company, 1970.

Gibbons, James F. New Structures for Higher Education Employing Educational Television. Stanford, Calif.: Stanford University, 1970.

Goodman, Paul. Compulsory Mis-Education and the Community of Scholars. New York: Random House, 1962.

---. Growing Up Absurd. New York: Vintage, 1956.

Goulet, Richard R., ed. Educational Change: The Reality and the Promise. New York: Citation Press, 1968.

Gross, Beatrice, and Ronald Gross, eds. Radical School Reform. New York: Simon & Schuster, 1970.

Harcleroad, Fred F., and others. The Developing State Colleges and Universities: Historical Background, Current Status, and Future Plans. Washington, D.C.: American Association of State Colleges and Universities, October 1969.

Hart, Leslie A. The Classroom Disaster. New York: Teachers College Press, 1969.

Henderson, Algo D. "Innovations in Education for the Professions," Educational Record, 290-97; Summer 1968.

Hentoff, Nat. Our Children Are Dying. New York: Viking Press, 1966.

Herndon, James. The Way It Spozed To Be. New York: Simon & Schuster, 1968.

Hickerson, Nathaniel. Education for Alienation. Edgewood Cliffs, N.J.: Prentice-Hall, 1966.

Holt, John. Freedom and Beyond. New York: Dutton, March 1972.

---. How Children Fail. New York: Dell, 1964.

---. How Children Learn. New York: Dell, 1968.

---. The Underachieving School. New York: Dell, 1969.

---. What Do I Do Monday? New York: Dutton, 1970.

Houston, W. Robert, and Robert B. Houston. Competency-Based Teacher Education: Progress, Problems and Prospects. Palo Alto, Calif.: Science Research Associates, April 1972.

How Teachers Make a Difference. A Report on Recent Research on Pupil Achievement. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Educaton, National Center for Improvement of Educational Systems, 1970. Available from U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402; order number HE5.258:58044.

Improving Undergraduate Education. East Lansing: Michigan State University, Committee on Undergraduate Education, October 1967.

James, Lord, of Rusholme. Teacher Education and Training (Teacher Training Inquiry.) Redwood City, Calif.: Pendragon House, March 1972.

Jencks, Christopher, and David Riesman. The Academic Revolution. Garden City, New York, 1969.

Kerber, August and Wilfred R. Smith, Educational Issues in a Changing Society. 3rd Edition. Detroit: Wayne State University Press [n.d.].

Kerner, Otto, and others. Report of the National Advisory Commission on Civil Disorders. New York: Bantam Books, March 1968. 608pp.

Klopf, Gordon J. "Leadership Roles in Educational Innovation," Special edition of the Journal of Research and Development in Education, 5; 1972.

Kohl, Herbert. Age of Complexity. New York: New American Library, 1965.

---. Thirty-Six Children. New York: Dell, 1967.

---. The Open Classroom. New York: Random House, 1969.

Kozol, J. Death At An Early Age: The Destruction of the Hearts and Minds of Negro Children in the Boston Public Schools. Boston: Houghton-Mifflin, 1967.

Leonard, George B. Education and Ecstasy. New York: Dell, 1968.

Masoner, Paul H. An Imperative: A National Policy for Teacher Education. Washington, D.C.: American Association of Colleges for Teacher Education; Newark, Dela.: International Reading Association, 1971.

Miller, S. M. "Alternatives to Schools," New York University Education Quarterly, 1; Summer 1970.

---, and Marsha Kroll. "Strategies for Reducing Credentialism," Action for Change in Public Service Careers. New York, Summer 1970.

Mosteller, Frederic, and Daniel Moynihan. On Equality of Educational Opportunity. New York: Random House, 1971.

Neill, A. S. Summerhill: A Radical Approach to Child Rearing. New York: Hart, 1961.

Newman, Frank, and others. Report on Higher Education. Washington, D.C.: U.S. Government Printing Office, Superintendent of Documents, March 1971.

Nordstrom, Carl, and others. Society's Children: A Study of Resentment in the Secondary School. New York: Random House, 1967.

Olson, Paul A., and others. Education for 1984 and After. Lincoln: University of Nebraska Press, January 1972.

Palola, Ernest. "Academic Reform: A Challenge for Statewide Planners," The Research Reporter, 5:1-4; 1970. Berkeley: University of California, Center for Research and Development in Higher Education.

Performance-Based Teacher Education: An Annotated Bibliography. Washington, D.C.: American Association of Colleges for Teacher Education Committee on Performance-Based Teacher Education, May 1971.

Pomeroy, Edward C. Beyond the Upheaval. Washington, D.C.: American Association of Colleges for Teacher Education, 1972.

Postman, Neil, and Charles Weingartner. Teaching as a Subversive Activity. New York: Dell, 1968.

---. Soft Revolution. New York: Dell, 1971.

Priorities in Higher Education. Washington, D.C.: Report of the President's Task Force on Higher Education (Hester Commission), August 1970.

Rosner, Benjamin, ed. The Power of Competency-Based Teacher Education. New York: Allyn and Bacon, 1972.

---, and others. The Power of Competency-Based Teacher Education: A Summary Statement. Princeton, N.J.: Educational Testing Service, Committee on National Priorities in Teacher Education, July 31, 1971.

Sarason, Seymour B. The Culture of the School and the Problem of Change. Boston: Allyn and Beacon, 1971.

Schmieder, Allen A. The State of the Scene (A Brief Outline of the National Competency Based Education Movement). Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1973.

---. "Task Force '72 Studies National Needs," AACTE Bulletin, 24; September 1971.

Schrag, Peter. Voices in the Classroom: Public Schools and Public Attitudes. Boston: Beacon Press, 1965.

Silberman, Charles. Crisis in the Classroom. New York: Random House, 1970.

Smith, B. Othanel, and others. Teachers for the Real World. Washington, D.C.: American Association of Colleges for Teacher Education, 1969.

Smith, Brooks, and others, eds. Partnership in Teacher Education. Washington, D.C.: American Association of Colleges for Teacher Education; Association of Teacher Educators.

Smith, William L. "Performance-Based Teacher Education: First Steps First." Paper presented at the National Conference on Performance-Based Teacher Education and Certification, May 24, 1971, Houston, Texas.

Smith, William L. "Revolution and Renewal," Elementary Principal [Association of Elementary School Principals, NEA], April 1972.

---. "The Melting Pot Theory: Demise of a Euphemism," Cultural Pluralism, A Mandate for Change in Education and Teacher Education. New York: Fordham University.

Stone, James C. Breakthrough in Teacher Education. San Francisco: Jossey-Bass Publishers, 1968.

Summer Institute on Improvement and Reform in American Education. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, National Center for the Improvement of Educational Systems, 1972.

Task Force '72: Final Report. Washington, D.C.: Task Force '72, 1972.

Taylor, Harold. The World as Teacher. New York: Doubleday & Co., 1969.

---. Students Without Teachers; The Crisis in the University. New York: Avon Press, 1969.

The Education Professions, A Report of the People Who Serve Our Schools and Colleges, 1968. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, 1969.

The Education Professions, A Report of the People Who Serve Our Schools and Colleges, 1969-1970. Washington, D.C.: U.S.Department of Health, Education and Welfare, Office of Education, 1971.

The Reforming of General Education: The Columbia College Experience in Its National Setting. New York: Daniel Bell, Columbia University Press, 1966.

Tiedt, Sidney. The Role of the Federal Government in Education. New York: Oxford University Press, 1966.

Tiep, Brian L., M.D. Technical Innovation and Entrepreneurship Program. Prescott, Ariz.: Prescott College, 1970.

To Improve Learning. A Report to the President and the Congress of the United States by the Commission on Instructional Technology, Committee on Education and Labor, March 1970, Washington, D.C., House of Representatives, 91st Congress, 2nd Session.

Toward Balanced Growth: Quality with Quality. Report of the National Goals Research Staff, July 4, 1970, Washington, D.C., The White House.

United States Department of Health, Education and Welfare, Office of Education, Literature Searches on Major Issues of Educational Reform; Iris Garfield, Project Director [The following twenty documents will be available in Research in Education after May].

Bellott, Fred. "What in the Past Have Been the Methodologies Employed in Ascertaining Local Educational Needs? What Methodologies Have Been Used in Responding to These Needs in Terms of Resource Allocation and Development?"

Bhaerman, Robert D. "Report of a Literature Search and Analysis of the Findings of that Search."

Crenshaw, Joseph W., and K. Fred Daniel. "What Has Been and Should Be the Role of State Education Agencies in the Development and Implementation of Teacher Education Programs."

DeBloois, Michael. "The Development of New Instructional Models."

Devore, Paul W. "Variables Affecting Change in Inservice Teacher Education."

Eachus, Herbert Todd. "Inservice Training of Teachers as Behavior Modifiers: Review and Analysis."

Eve, Arthur W. "Variables of Institutional Change at the Elementary and Secondary School Levels."

Gee, James, and David C. Berliner. "Protocols: A New Dimension in Teacher Education."

Guttenberg, Richard. "Incentive Systems for Educational Personnel."

Johnson, William. "Preparing Teachers To Teach Brunerian Curricula."

Joyce, Bruce R. "The Promise of Performance (competency)--Based Education: An Analytical Review of Literature and Experience."

Mayhew, Lewis B. "Elements of the Institutional Change Process."

Mohr, Paul. "Current Research and Development Efforts in Inservice Training and Curriculum Planning for Teacher Education."

Olivier, Maurice. "A Review of the Literature--Training and the Change Process."

Peck, Roger H. "The Utilization of Simulation in Teacher Preparation."

Peeler, Thomas H., and Jerome R. Shapiro. "A Focus on the Cooperative Reorganization of Preservice and Inservice Teacher Education Programs."

Orlosky, Donald E., and B. O. Smith. "A Study of Educational Change."

Sobol, Francis Thomas. "What Variables Appear Important in Changing Traditional In-service Training Procedures?"

Ulibarri, Marci-Luci. "Of the Variables Causing an Institution To Have an Outstanding Teacher Education Program, How Much Import Can Be Attributed to the Fact that the Institution Recruits and Selects 'Outstanding' Students?"

Woodruff, Philip. "British Primary Education: Components of Innovation."

University Without Walls--A Proposal for an Experimental Degree Program in Undergraduate Education. Yellow Springs, Ohio: Antioch College, Union for Experimenting Colleges and Universities, September 28, 1970.

Yours, Joseph. Windows to the Bureaucracy. Washington, D.C.: National Advisory Council of Education Professions, 1972.

Whaley, W. Gordon, ed. In These Times: A Look at Graduate Education with Proposals for the Future. Austin, Tex.: The Graduate Journal, 1971.

APPENDIX D:
A Selected Bibliography
of Educational Glossaries and Directories

Blishen, Edward, ed. Encyclopedia of Education. New York: Philosophical Library, 1970.

Dieighton, Lee C., ed-in-chief. Encyclopedia of Education. New York: Macmillan and Free Press, 1971.

Good, Carter Victor. Dictionary of Education. New York: McGraw-Hill, 1969.

Harris, Yeuell Y., and Ivan N. Seibert, eds. The State Education Agency State Educational Records and Reports Series: Handbook VII. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office, 1971; order number OE-23054.

Rivlin, Harry N., and Herbert Schueler, eds. Encyclopedia of Modern Education. Port Washington, N.Y.: Kennikat Press, 1969.

Smith, Edward W., and others. The Educators Encyclopedia. Englewood Cliffs, N.J.: Prentice-Hall, 1961.

Standard Education Almanac. Los Angeles: Academic Media, 1968.

Thesaurus of ERIC Descriptors. New York: CCM Information Corporation, 1972.

Appendix E:
Statistics of Trends in Education

Trends in Education: United States, 1960–61 to 1980–81

Characteristic	Fall 1960	Fall 1970	Percent change, 1960 to 1970	Fall 1980 [1] (projected)	Percent change 1970 to 1980
	Thousands			*Thousands*	
School-age population:					
5–13	33,664	36,443	8	[2] 33,950	–7
14–17	11,411	15,992	40	[2] 15,289	–4
18–21	9,724	14,616	50	[2] 16,712	14
18 (nearest birthday)	2,789	3,826	37	[2] 4,074	6
Public school districts	38.1	18.0	–53	—	—
Operating	33.3	17.2	–48	—	—
Nonoperating	4.8	0.8	–83	—	—
Enrollment:					
K–grade 12	42,181	51,404	22	49,200	–4
K–8	32,492	36,674	13	34,800	–5
9–12	9,689	14,730	52	14,400	–2
Public	36,281	45,904	27	44,800	–2
K–8	27,692	32,574	18	31,800	–2
9–12	8,589	13,330	55	13,000	–2
Nonpublic	5,900	5,500	–7	4,400	–20
Higher education:					
Degree credit	3,583	7,920	121	12,050	52
Public	2,116	5,800	174	9,762	68
Private	1,467	2,120	45	2,288	8
4-year	3,131	6,280	101	9,049	44
2-year	451	1,630	261	3,001	84
Undergraduate	3,227	7,020	118	10,551	50
First time	923	1,780	93	2,427	36
Graduate	356	900	153	1,499	67
Men	2,257	4,637	105	6,587	42
Women	1,326	3,284	148	5,463	66
Full time	2,466	5,489	123	7,901	44
Part time	1,117	2,431	118	4,149	71
Full-time equivalent	2,835	6,299	122	9,284	47
Nondegree credit	206	661	221	1,227	86
Public	161	628	290	1,190	89
Private	46	33	–28	36	9

Financial Trends in Education: United States, 1960–61 to 1980–81

Characteristic	Unadjusted dollars 1960–61	Unadjusted dollars 1970–71	Constant 1970–71 dollars 1980–81
	Billions of dollars		
Total expenditures by regular educational institutions:			
All levels	$27.1	$ 77.9	$105.3
Public	21.2	62.9	86.2
Nonpublic	5.9	15.0	19.1
Elementary and secondary schools	19.4	49.8	59.7
Public	17.0	44.4	54.2
Nonpublic	2.4	5.4	5.5
Institutions of higher education	7.7	28.1	45.6
Public	4.2	18.5	32.0
Nonpublic	3.5	9.6	13.6
	Dollars		
Current expenditure per pupil in average daily attendance in public elementary-secondary schools	$396	$858	$1,092
Estimated average charges per full-time undergraduate degree-credit student:			
Tuition and required fees:			
Public	211	344	419
Private	857	1,649	2,193
Board:			
Public	421	534	534
Private	470	588	588
Dormitory rooms:			
Public	218	395	497
Private	275	475	601

	1960–61	1970–71		1980–81	
High school graduates	1,971	3,036	54	3,340	10
Public	1,732	2,726	57	3,030	11
Nonpublic	239	310	30	310	0
Men	958	1,506	57	1,680	12
Women	1,013	1,530	51	1,660	8
Percent of 18-year-olds graduating from high school	69.6	77.2	—	83.7	—
Percent of high school graduates going on to college	51.6	62.3	—	72.3	—
Earned degrees:					
Bachelor's and first-professional	395	863	118	1,334	55
Men	253	501	98	713	42
Women	142	362	155	620	71
Master's	81.7	224.0	174	395.9	77
Men	55.4	133.6	141	227.0	70
Women	26.4	90.4	242	168.9	87
Doctor's	10.6	32.0	202	68.7	115
Men	9.5	27.6	191	58.2	111
Women	1.1	4.4	300	10.5	139
Elementary and secondary instructional staff:	Fall 1960	Fall 1970		Fall 1980	
Classroom teachers	1,600	2,312	44	2,349	2
Elementary	991	1,295	31	1,305	1
Secondary	609	1,017	67	1,044	3
Public	1,408	2,061	46	2,134	4
Elementary	858	1,132	32	1,178	4
Secondary	550	929	69	956	3
Nonpublic	192	251	31	215	–14
Other instructional staff (public)	117	258	121	320	24
Higher education instructional staff, resident courses	276	590	114	873	48
Full-time equivalent	202	468	132	693	48

[1] Projections are based on assumptions given in appendix A of *Projections of Educational Statistics to 1980-81*. Users should check the acceptability of these assumptions for their purposes.
[2] Population projections are based on Series D from the Bureau of the Census.
[3] Includes current expenditures, interest, and capital outlay.
NOTE.—Data are for the 50 States and the District of Columbia. Because of rounding, detail may not add to totals.

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